

0066099



Analytical Data Package Prepared For
Fluor Hanford Inc.

Radiochemical Analysis By
STL Richland

2800 G.W. Way, Richland Wa, 99352, (509)-375-3131.

Assigned Laboratory Code: STLRL
Data Package Contains 71 Pages

Report No.: 28402

SDG No.	Order No.	Client Sample ID (List Order)	Lot-Sa No.	Work Order	Report DB ID	Batch No.
W04589	F05-009	B1CF64	J5C160275-1	G6CW51AA	9G6CW510	5076485
		B1CF64	J5C160275-1	G6CW51AC	9G6CW510	5076486
		B1CF65	J5C160275-2	G6CW81AA	9G6CW810	5076485
		B1CF65	J5C160275-2	G6CW81AC	9G6CW810	5076486
		B1CF67	J5C160275-3	G6CXC1AA	9G6CXC10	5076485
		B1CF67	J5C160275-3	G6CXC1AC	9G6CXC10	5076486
		B1CF68	J5C160275-4	G6CXJ1AA	9G6CXJ10	5076485
		B1CF68	J5C160275-4	G6CXJ1AC	9G6CXJ10	5076486
		B1CF69	J5C160275-5	G6CXL1AA	9G6CXL10	5076485
		B1CF69	J5C160275-5	G6CXL1AC	9G6CXL10	5076486
		B1CF70	J5C160275-6	G6CXN1AA	9G6CXN10	5076485
		B1CF70	J5C160275-6	G6CXN1AC	9G6CXN10	5076486
		B1CF71	J5C160275-7	G6CXQ1AA	9G6CXQ10	5076485
		B1CF71	J5C160275-7	G6CXQ1AC	9G6CXQ10	5076486
		B1CF87	J5C160275-8	G6CXR1AA	9G6CXR10	5076485
		B1CF87	J5C160275-8	G6CXR1AC	9G6CXR10	5076486
		B1CFC3	J5C160275-9	G6CXT1AA	9G6CXT10	5076485
		B1CFC3	J5C160275-9	G6CXT1AC	9G6CXT10	5076486
		B1CFC4	J5C160275-10	G6CXV1AA	9G6CXV10	5076485
		B1CFC4	J5C160275-10	G6CXV1AC	9G6CXV10	5076486
	F05-009	B1CFC5	J5C160275-11	G6CXW1AA	9G6CXW10	5076485
		B1CFC5	J5C160275-11	G6CXW1AC	9G6CXW10	5076486
		B1CFC6	J5C160275-12	G6CXX1AA	9G6CXX10	5076485
		B1CFC6	J5C160275-12	G6CXX1AC	9G6CXX10	5076486
		B1CFC7	J5C160275-13	G6CX51AA	9G6CX510	5076485
		B1CFC7	J5C160275-13	G6CX51AC	9G6CX510	5076486

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Report No.: 28402

SDG No.	Order No.	Client Sample ID (List Order)	Lot-Sa No.	Work Order	Report DB ID	Batch No.
W04589	F05-009	B1CFC8	J5C160275-14	G6CX81AA	9G6CX810	5076485
		B1CFC8	J5C160275-14	G6CX81AC	9G6CX810	5076486
		B1CFC9	J5C160275-15	G6C0A1AA	9G6C0A10	5076485
		B1CFC9	J5C160275-15	G6C0A1AC	9G6C0A10	5076486
		B1CFD0	J5C160275-16	G6C0D1AA	9G6C0D10	5076485
		B1CFD0	J5C160275-16	G6C0D1AC	9G6C0D10	5076486
		B1CFD1	J5C160275-17	G6C0H1AA	9G6C0H10	5076485
		B1CFD1	J5C160275-17	G6C0H1AC	9G6C0H10	5076486
		B1CFD2	J5C160275-18	G6C0L1AA	9G6C0L10	5076485
		B1CFD2	J5C160275-18	G6C0L1AC	9G6C0L10	5076486
		B1CFD3	J5C160275-19	G6C0M1AA	9G6C0M10	5076485
		B1CFD3	J5C160275-19	G6C0M1AC	9G6C0M10	5076486

STL Richland
2800 George Washington Way
Richland, WA 99354

Tel: 509 375 3131 Fax: 509 375 5590
www.stl-inc.com

Certificate of Analysis

Fluor Hanford
P.O. Box 1000, T6-03
Richland, WA 99352

March 29, 2005

Attention: Steve Trent

SAF Number	:	F05-009
Date SDG Closed	:	March 16, 2005
Number of Samples	:	Nineteen (19)
Sample Type	:	Soil
SDG Number	:	W04589
Data Deliverable	:	7-Day / 15-Day Summary

CASE NARRATIVE

I. Introduction

On March 16, 2005, nineteen water samples were received at STL Richland (STLR) for radiochemical analysis. Upon receipt, the samples were assigned the following laboratory ID numbers to correspond with the Fluor Hanford (FH) specific IDs:

<u>FH ID#</u>	<u>STLR ID#</u>	<u>MATRIX</u>	<u>DATE OF RECEIPT</u>
B1CF64	G6CW5	SOIL	3/16/05
B1CF65	G6CW8	SOIL	3/16/05
B1CF67	G6CXC	SOIL	3/16/05
B1CF68	G6CXJ	SOIL	3/16/05
B1CF69	G6CXL	SOIL	3/16/05
B1CF70	G6CXN	SOIL	3/16/05
B1CF71	G6CXQ	SOIL	3/16/05
B1CF87	G6CXR	SOIL	3/16/05
B1CFC3	G6CXT	SOIL	3/16/05
B1CFC4	G6CXV	SOIL	3/16/05
B1CFC5	G6CXW	SOIL	3/16/05
B1CFC6	G6CXX	SOIL	3/16/05
B1CFC7	G6CX5	SOIL	3/16/05
B1CFC8	G6CX8	SOIL	3/16/05

B1CFC9	G6C0A	SOIL	3/16/05
B1CFD0	G6C0D	SOIL	3/16/05
B1CFD1	G6C0H	SOIL	3/16/05
B1CFD2	G6C0L	SOIL	3/16/05
B1CFD3	G6C0M	SOIL	3/16/05

II. Sample Receipt

The samples were received in good condition and no anomalies were noted during check-in.

III. Analytical Results/Methodology

The analytical results for this report are presented by laboratory sample ID. Each set of data includes sample identification information, analytical results and the appropriate associated statistical errors.

The requested analyses were:

Alpha Spectroscopy

Uranium-234, -235, -238 by method RUCH-RC-5067

Liquid Scintillation Counting

Technetium-99 by method RICH-RC-5078

IV. Quality Control

The analytical results for each analysis performed under SDG W04589 includes a minimum of one laboratory control sample (LCS), one method (reagent) blank, and one duplicate sample analysis. Any exceptions have been noted in the "Comments" section.

QC and sample results are reported in the same units.

V. Comments

Alpha Spectroscopy

Uranium-234, -235, -238 by method RUCH-RC-5067:

The LCS, batch blank, samples and sample duplicate (B1CF64) results are within contractual requirements.

Liquid Scintillation Counting

Technetium-99 by method RICH-RC-5078:

The LCS, batch blank, samples, sample duplicate (B1CF65) and sample matrix spike (B1CF67) results are within contractual requirements.

Fluor Hanford
March 29, 2005
Page 3

I certify that this Certificate of Analysis is in compliance with the SOW, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Manager, or a designee as verified by the following signature.

Reviewed and approved:


for Becky Warrington
Project Manager

Drinking Water Method Cross References

DRINKING WATER ASTM METHOD CROSS REFERENCES		
Referenced Method	Isotope(s)	STL Richland's SOP number
EPA 901.1	Cs-134, I-131	RICH-RC-5017
EPA 900.0	Alpha & Beta	RICH-RC-5014
EPA 903.1	Ra-226	RICH-RC-5005
EPA 904.0	Ra-228	RICH-RC-5005
EPA 905.0	Sr89/90	RICH-RC-5006
ASTM D2460	Total Radium	RICH-RC-5027
Standard Method 7500-U-C & ASTM D5174	Uranium	RICH-RC-5058
EPA 906.0	Tritium	RICH-RC-5007
NOTE:		
The Gross Alpha LCS is prepared with Am-241 (unless otherwise specified in the case narrative)		
The Gross Beta LCS is prepared with Sr/Y-90 (unless otherwise specified in the case narrative)		

Uncertainty Estimation

STL Richland has adopted the internationally accepted approach to estimating uncertainties described in "NIST Technical Note 1297, 1994 Edition". The approach, "Law of Propagation of Errors", involves the identification of all variables in an analytical method which are used to derive a result. These variables are related to the analytical result (R) by some functional relationship, $R = \text{constants} * f(x,y,z,\dots)$. The components (x,y,z) are evaluated to determine their contribution to the overall method uncertainty. The individual component uncertainties (u_i) are then combined using a statistical model that provides the most probable overall uncertainty value. All component uncertainties are categorized as type A, evaluated by statistical methods, or type B, evaluated by other means. Uncertainties not included in the components, such as sample homogeneity, are combined with the component uncertainty as the square root of the sum-of-the-squares of the individual uncertainties. The uncertainty associated with the derived result is the combined uncertainty (u_c) multiplied by the coverage factor (1,2, or 3).

When three or more sample replicates are used to derive the analytical result, the type A uncertainty is the standard deviation of the mean value (S/\sqrt{n}), where S is the standard deviation of the derived results. The type B uncertainties are all other random or non-random components that are not included in the standard deviation.

The derivation of the general "Law of Propagation of Errors" equations and specific example are available on request.

Report Definitions

Action Lev	An agreed upon activity level used to trigger some action when the final result is greater than or equal to the Action Level. Often the Action Level is related to the Decision Limit.
Batch	The QC preparation batch number that relates laboratory samples to QC samples that were prepared and analyzed together.
Bias	Defined by the equation $(\text{Result}/\text{Expected})-1$ as defined by ANSI N13.30.
COC No	Chain of Custody Number assigned by the Client or STL Richland.
Count Error (#s)	Poisson counting statistics of the gross sample count and background. The uncertainty is absolute and in the same units as the result. For Liquid Scintillation Counting (LSC) the batch blank count is the background.
Total Uncert (#s) <i>u_c - Combined Uncertainty.</i>	All known uncertainties associated with the preparation and analysis of the sample are propagated to give a measure of the uncertainty associated with the result, <i>u_c the combined uncertainty</i> . The uncertainty is absolute and in the same units as the result.
(#s), Coverage Factor	The coverage factor defines the width of the confidence interval, 1, 2 or 3 standard deviations.
CRDL (RL)	Contractual Required Detection Limit as defined in the Client's Statement Of Work or STL Richland "default" nominal detection limit. Often referred to the reporting level (RL)
Lc	Decision Level based on instrument background or blank, adjusted by the Efficiency, Chemical Yield, and Volume associated with the sample. The Type I error probability is approximately 5%. $Lc = (1.645 * \text{Sqrt}(2 * (\text{BkgndCnt}/\text{BkgndCntMin})/\text{SCntMin})) * (\text{ConvFct}/(\text{Eff} * \text{Yld} * \text{Abn} * \text{Vol}) * \text{IngrFct})$. For LSC methods the batch blank is used as a measure of the background variability. Lc cannot be calculated when the background count is zero.
Lot-Sample No	The number assigned by the LIMS software to track samples received on the same day for a given client. The sample number is a sequential number assigned to each sample in the Lot.
MDC MDA	Detection Level based on instrument background or blank, adjusted by the Efficiency, Chemical Yield, and Volume with a Type I and II error probability of approximately 5%. $MDC = (4.65 * \text{Sqrt}((\text{BkgndCnt}/\text{BkgndCntMin})/\text{SCntMin}) + 2.71/\text{SCntMin}) * (\text{ConvFct}/(\text{Eff} * \text{Yld} * \text{Abn} * \text{Vol}) * \text{IngrFct})$. For LSC methods the batch blank is used as a measure of the background variability.
Primary Detector	The instrument identifier associated with the analysis of the sample aliquot.
Ratio U-234/U-238	The U-234 result divided by the U-238 result. The U-234/U-238 ratio for natural uranium in NIST SRM 4321C is 1.038.
Rst/MDC	Ratio of the Result to the MDC. A value greater than 1 may indicate activity above background at a high level of confidence. Caution should be used when applying this factor and it should be used in concert with the qualifiers associated with the result.
Rst/TotUcert	Ratio of the Result to the Total Uncertainty. If the uncertainty has a coverage factor of 2 a value greater than 1 may indicate activity above background at approximately the 95% level of confidence assuming a two-sided confidence interval. Caution should be used when applying this factor and it should be used in concert with the qualifiers associated with the result.
Report DB No	Sample Identifier used by the report system. The number is based upon the first five digits of the Work Order Number.
RER	The equation Replicate Error Ratio = $(S-D)/[\text{sqrt}(\text{TPUs}^2 + \text{TPUd}^2)]$ as defined by ICPT BOA where S is the original sample result, D is the result of the duplicate, TPUs is the total uncertainty of the original sample and TPUd is the total uncertainty of the duplicate sample.
SDG	Sample Delivery Group Number assigned by the Client or assigned by STL Richland upon sample receipt.
Sum Rpt Alpha Spec Rst(s)	The sum of the reported alpha spec results for tests derived from the same sample excluding duplicate result where the results are in the same units.
Work Order	The LIMS software assign test specific identifier.
Yield	The recovery of the tracer added to the sample such as Pu-242 used to trace a Pu-239/40 method.

Sample Results Summary

Date: 29-Mar-05

STL Richland STLRL

Ordered by Method, Batch No., Client Sample ID.

Report No. : 28402

SDG No: W04589

Batch	Client Id Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Yield	MDC or MDA	CRDL	RPD
5076485 UIISO_IE_PLATE_AEA									
B1CF64									
	G6CW51AA	U-234	6.00E-01 +- 1.47E-01		pCi/g	72%	3.13E-02	1.00E+00	
		U-235	4.43E-02 +- 2.95E-02		pCi/g	72%	2.69E-02	1.00E+00	
		U-238	5.59E-01 +- 1.39E-01		pCi/g	72%	2.92E-02	1.00E+00	
B1CF64 DUP									
	G6CW51AD	U-234	7.03E-01 +- 1.78E-01		pCi/g	56%	2.57E-02	1.00E+00	15.8
		U-235	2.15E-02 +- 2.19E-02	U	pCi/g	56%	1.46E-02	1.00E+00	69.3
		U-238	6.41E-01 +- 1.66E-01		pCi/g	56%	3.69E-02	1.00E+00	13.7
B1CF65									
	G6CW81AA	U-234	7.78E-01 +- 1.90E-01		pCi/g	57%	4.79E-02	1.00E+00	
		U-235	3.20E-02 +- 2.82E-02	U	pCi/g	57%	3.54E-02	1.00E+00	
		U-238	7.92E-01 +- 1.93E-01		pCi/g	57%	4.23E-02	1.00E+00	
B1CF67									
	G6CXC1AA	U-234	8.41E-01 +- 1.96E-01		pCi/g	64%	4.15E-02	1.00E+00	
		U-235	5.47E-02 +- 3.52E-02		pCi/g	64%	3.62E-02	1.00E+00	
		U-238	8.66E-01 +- 2.01E-01		pCi/g	64%	3.81E-02	1.00E+00	
B1CF68									
	G6CXJ1AA	U-234	1.68E+00 +- 3.60E-01		pCi/g	54%	5.07E-02	1.00E+00	
		U-235	6.64E-02 +- 4.00E-02		pCi/g	54%	2.98E-02	1.00E+00	
		U-238	1.77E+00 +- 3.77E-01		pCi/g	54%	5.07E-02	1.00E+00	
B1CF69									
	G6CXL1AA	U-234	4.43E+00 +- 8.39E-01		pCi/g	66%	2.55E-02	1.00E+00	
		U-235	1.75E-01 +- 6.44E-02		pCi/g	66%	2.16E-02	1.00E+00	
		U-238	4.46E+00 +- 8.44E-01		pCi/g	66%	2.16E-02	1.00E+00	
B1CF70									
	G6CXN1AA	U-234	4.16E-01 +- 1.30E-01		pCi/g	47%	1.74E-02	1.00E+00	
		U-235	6.41E-03 +- 1.29E-02	U	pCi/g	47%	1.74E-02	1.00E+00	
		U-238	4.81E-01 +- 1.39E-01		pCi/g	47%	1.74E-02	1.00E+00	
B1CF71									
	G6CXQ1AA	U-234	5.72E-01 +- 1.45E-01		pCi/g	66%	1.26E-02	1.00E+00	
		U-235	2.79E-02 +- 2.33E-02		pCi/g	66%	1.26E-02	1.00E+00	
		U-238	6.17E-01 +- 1.54E-01		pCi/g	66%	2.23E-02	1.00E+00	
B1CF87									
	G6CXR1AA	U-234	5.97E-01 +- 1.43E-01		pCi/g	76%	1.08E-02	1.00E+00	
		U-235	2.70E-02 +- 2.16E-02		pCi/g	76%	1.90E-02	1.00E+00	
		U-238	6.28E-01 +- 1.49E-01		pCi/g	76%	1.90E-02	1.00E+00	
B1CFC3									
	G6CXT1AA	U-234	6.69E-01 +- 1.55E-01		pCi/g	72%	1.83E-02	1.00E+00	

STL Richland

RPD - Relative Percent Difference.

rptSTLRichSaSummary2 V4.11 A97

U Qual - Analyzed for, but the result is less than the Mdc/Mda/Total Uncert or gamma scan software did not identify the nuclide.

Sample Results Summary

Date: 29-Mar-05

STL Richland STLRL

Ordered by Method, Batch No., Client Sample ID.

Report No. : 28402

SDG No: W04589

Batch	Client Id Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Yield	MDC or MDA	CRDL	RPD
5076485 UI50_IE_PLATE_AEA									
B1CFC3									
	G6CXT1AA	U-235	3.83E-03 +- 7.69E-03	U	pCi/g	72%	1.04E-02	1.00E+00	
		U-238	6.47E-01 +- 1.51E-01		pCi/g	72%	1.04E-02	1.00E+00	
B1CFC4									
	G6CXV1AA	U-234	6.00E-01 +- 1.42E-01		pCi/g	79%	1.81E-02	1.00E+00	
		U-235	3.78E-03 +- 7.59E-03	U	pCi/g	79%	1.02E-02	1.00E+00	
		U-238	5.03E-01 +- 1.24E-01		pCi/g	79%	1.02E-02	1.00E+00	
B1CFC5									
	G6CXW1AA	U-234	8.11E-01 +- 1.91E-01		pCi/g	65%	1.27E-02	1.00E+00	
		U-235	2.31E-02 +- 2.14E-02		pCi/g	65%	1.89E-02	1.00E+00	
		U-238	7.50E-01 +- 1.80E-01		pCi/g	65%	1.27E-02	1.00E+00	
B1CFC6									
	G6CXX1AA	U-234	2.06E+00 +- 4.02E-01		pCi/g	76%	2.06E-02	1.00E+00	
		U-235	8.82E-02 +- 4.01E-02		pCi/g	76%	1.76E-02	1.00E+00	
		U-238	1.62E+00 +- 3.24E-01		pCi/g	76%	2.18E-02	1.00E+00	
B1CFC7									
	G6CX51AA	U-234	6.33E-01 +- 1.50E-01		pCi/g	78%	2.24E-02	1.00E+00	
		U-235	2.71E-02 +- 2.16E-02		pCi/g	78%	1.81E-02	1.00E+00	
		U-238	4.81E-01 +- 1.22E-01		pCi/g	78%	2.73E-02	1.00E+00	
B1CFC8									
	G6CX81AA	U-234	1.69E+00 +- 3.55E-01		pCi/g	61%	1.32E-02	1.00E+00	
		U-235	7.75E-02 +- 4.14E-02		pCi/g	61%	1.96E-02	1.00E+00	
		U-238	1.78E+00 +- 3.71E-01		pCi/g	61%	1.32E-02	1.00E+00	
B1CFC9									
	G6C0A1AA	U-234	7.41E-01 +- 1.70E-01		pCi/g	80%	1.84E-02	1.00E+00	
		U-235	3.13E-02 +- 2.35E-02		pCi/g	80%	2.01E-02	1.00E+00	
		U-238	7.78E-01 +- 1.77E-01		pCi/g	80%	1.09E-02	1.00E+00	
B1CFD0									
	G6C0D1AA	U-234	8.95E-01 +- 2.00E-01		pCi/g	72%	2.87E-02	1.00E+00	
		U-235	2.68E-02 +- 2.28E-02		pCi/g	72%	2.64E-02	1.00E+00	
		U-238	7.96E-01 +- 1.82E-01		pCi/g	72%	2.64E-02	1.00E+00	
B1CFD1									
	G6C0H1AA	U-234	5.72E+00 +- 1.05E+00		pCi/g	80%	2.87E-02	1.00E+00	
		U-235	2.72E-01 +- 8.08E-02		pCi/g	80%	1.87E-02	1.00E+00	
		U-238	4.38E+00 +- 8.12E-01		pCi/g	80%	2.87E-02	1.00E+00	
B1CFD2									
	G6C0L1AA	U-234	6.04E+00 +- 1.12E+00		pCi/g	68%	4.28E-02	1.00E+00	
		U-235	2.90E-01 +- 8.71E-02		pCi/g	68%	3.09E-02	1.00E+00	

STL Richland

RPD - Relative Percent Difference.

rptSTLRchSaSummary2 V4.11 A97

U Qual - Analyzed for, but the result is less than the Mdc/Mda|Total Uncert or gamma scan software did not identify the nuclide.

Sample Results Summary

Date: 29-Mar-05

STL Richland STLRL

Ordered by Method, Batch No., Client Sample ID.

Report No. : 28402

SDG No: W04589

Batch	Client Id Work Order	Parameter	Result +/- Uncertainty (2s)	Qual	Units	Yield	MDC or MDA	CRDL	RPD
5076485 UIISO_IE_PLATE_AEA									
B1CFD2									
	G6C0L1AA	U-238	4.86E+00 +/- 9.08E-01		pCi/g	68%	3.90E-02	1.00E+00	
B1CFD3									
	G6C0M1AA	U-234	1.68E+00 +/- 3.31E-01		pCi/g	82%	3.12E-02	1.00E+00	
		U-235	4.64E-02 +/- 2.85E-02		pCi/g	82%	2.83E-02	1.00E+00	
		U-238	1.83E+00 +/- 3.59E-01		pCi/g	82%	3.70E-02	1.00E+00	
5076486 TC99_ETVDSK_LSC									
B1CF64									
	G6CW51AC	TC-99	8.22E-02 +/- 3.86E-01	U	pCi/g	100%	6.63E-01	1.50E+01	
B1CF65									
	G6CW81AC	TC-99	4.78E-02 +/- 3.85E-01	U	pCi/g	100%	6.64E-01	1.50E+01	
B1CF65 DUP									
	G6CW81AD	TC-99	-1.52E-01 +/- 3.73E-01	U	pCi/g	100%	6.59E-01	1.50E+01	-384.5
B1CF67									
	G6CXC1AC	TC-99	4.90E-03 +/- 3.80E-01	U	pCi/g	100%	6.52E-01	1.50E+01	
B1CF68									
	G6CXJ1AC	TC-99	-2.46E-01 +/- 3.67E-01	U	pCi/g	100%	6.53E-01	1.50E+01	
B1CF69									
	G6CXL1AC	TC-99	-2.77E-01 +/- 3.66E-01	U	pCi/g	100%	6.53E-01	1.50E+01	
B1CF70									
	G6CXN1AC	TC-99	2.33E-01 +/- 3.93E-01	U	pCi/g	100%	6.55E-01	1.50E+01	
B1CF71									
	G6CXQ1AC	TC-99	3.31E-02 +/- 3.81E-01	U	pCi/g	100%	6.48E-01	1.50E+01	
B1CF87									
	G6CXR1AC	TC-99	-2.91E-01 +/- 3.64E-01	U	pCi/g	100%	6.48E-01	1.50E+01	
B1CFC3									
	G6CXT1AC	TC-99	2.86E-01 +/- 3.99E-01	U	pCi/g	100%	6.73E-01	1.50E+01	
B1CFC4									
	G6CXV1AC	TC-99	9.93E-01 +/- 3.92E-01		pCi/g	100%	6.26E-01	1.50E+01	
B1CFC5									
	G6CXW1AC	TC-99	3.55E-01 +/- 3.58E-01	U	pCi/g	100%	6.29E-01	1.50E+01	
B1CFC6									
	G6CXX1AC	TC-99	1.56E+00 +/- 4.25E-01		pCi/g	100%	6.27E-01	1.50E+01	
B1CFC7									
	G6CX51AC	TC-99	6.67E-02 +/- 3.41E-01	U	pCi/g	100%	6.30E-01	1.50E+01	
B1CFC8									
	G6CX81AC	TC-99	3.44E-02 +/- 3.39E-01	U	pCi/g	100%	6.29E-01	1.50E+01	
B1CFC9									
	G6C0A1AC	TC-99	-8.58E-02 +/- 3.32E-01	U	pCi/g	100%	6.25E-01	1.50E+01	

STL Richland

RPD - Relative Percent Difference.

rptSTLRchSaSummary2 V4.11 A97

U Qual - Analyzed for, but the result is less than the Mdc/Mda/Total Uncert or gamma scan software did not identify the nuclide.

Sample Results Summary

Date: 29-Mar-05

STL Richland STLRL

Ordered by Method, Batch No., Client Sample ID.

Report No. : 28402

SDG No: W04589

Batch	Client Id Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Yield	MDC or MDA	CRDL	RPD
5076486	TC99_ETVDSK_LSC								
	B1CFD0								
	G6C0D1AC	TC-99	3.53E-01 +- 3.58E-01	U	pCi/g	100%	6.33E-01	1.50E+01	
	B1CFD1								
	G6C0H1AC	TC-99	7.07E-01 +- 3.76E-01		pCi/g	100%	6.25E-01	1.50E+01	
	B1CFD2								
	G6C0L1AC	TC-99	4.36E-01 +- 3.62E-01	U	pCi/g	100%	6.28E-01	1.50E+01	
	B1CFD3								
	G8C0M1AC	TC-99	3.34E-01 +- 3.56E-01	U	pCi/g	100%	6.27E-01	1.50E+01	
No. of Results:		80							

STL Richland

RPD - Relative Percent Difference.

rptSTLRchSaSummary2 V4.11 A97

U Qual - Analyzed for, but the result is less than the Mdc/Mda/Total Uncert or gamma scan software did not identify the nuclide.

QC Results Summary

Date: 29-Mar-05

STL Richland STLRL

Ordered by Method, Batch No, QC Type,.

Report No. : 28402

SDG No.: W04589

Batch	Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Yield	Recovery	Bias	MDC MDA
UIISO_IE_PLATE_AEA									
5076485 BLANK QC									
	G6GV81AA	U-234	6.26E-04 +- 9.60E-03	U	pCi/g	93%			2.80E-02
		U-235	-1.25E-03 +- 1.78E-03	U	pCi/g	93%			1.77E-02
		U-238	-3.75E-03 +- 7.53E-03	U	pCi/g	93%			3.00E-02
5076485 LCS									
	G6GV81AC	U-234	1.84E+00 +- 3.21E-01		pCi/g	88%	100%	0.0	1.91E-02
		U-238	1.75E+00 +- 3.39E-01		pCi/g	88%	101%	0.0	1.62E-02
TC99_ETVDSK_LSC									
5076486 MATRIX SPIKE									
	G6CXC1AD	TC-99	1.72E+02 +- 1.02E+01		pCi/g	100%	76%	-0.2	6.55E-01
5076486 BLANK QC									
	G6GWF1AA	TC-99	2.43E-01 +- 3.51E-01	U	pCi/g	100%			6.30E-01
5076486 LCS									
	G6GWF1AC	TC-99	1.82E+02 +- 1.06E+01		pCi/g	100%	80%	-0.2	6.28E-01
No. of Results: 8									

STL Richland

Bias - (Result/Expected)-1 as defined by ANSI N13.30.

rptSTLRchQcSummary V4.11 A97

U Qual - Analyzed for, but the result is less than the Mdc/Mda|Total Uncert or gamma scan software did not identify the nuclide.

FORM I
SAMPLE RESULTS

Date: 29-Mar-05

Lab Name: STL Richland
Lot-Sample No.: J5C160275-1
Client Sample ID: B1CF64

SDG: W04589
Report No.: 28402
COC No.: F05-009-078

Collection Date: 3/8/2005 12:15:00 PM
Received Date: 3/16/2005 12:30:00 PM
Matrix: SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 5076485	UI50_IE_PLATE_AEA		Work Order: G6CW51AA		Report DB ID: 9G6CW510							
U-234	6.00E-01		1.02E-01	1.47E-01	3.13E-02	pCi/g	72%	(19.2)	3/24/05 10:24 p		2.02	ALP1
							9.90E-03	1.00E+00			G	
U-235	4.43E-02		2.84E-02	2.95E-02	2.69E-02	pCi/g	72%	(1.6)	3/24/05 10:24 p		2.02	ALP1
							7.67E-03	1.00E+00			G	
U-238	5.59E-01		9.79E-02	1.39E-01	2.92E-02	pCi/g	72%	(19.1)	3/24/05 10:24 p		2.02	ALP1
							8.86E-03	1.00E+00			G	
<i>Ratio U-234/238 = 1.1</i>												
Batch: 5076486	TC99_ETVDSK_LSC		Work Order: G6CW51AC		Report DB ID: 9G6CW510							
TC-99	8.22E-02	U	2.74E-01	3.86E-01	6.63E-01	pCi/g	100%	0.12	3/25/05 07:58 a		2.0	LSC4
							3.19E-01	1.50E+01			G	

No. of Results: 4 Comments:

STL Richland MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
rptSTLRchSample U Qual - Analyzed for, but the result is less than the Mdc/Mda|Total Uncert or gamma scan software did not identify the nuclide.
V4.11 A97

FORM I

Date: 29-Mar-05

SAMPLE RESULTS

Lab Name: STL Richland

SDG: W04589

Collection Date: 3/9/2005 2:30:00 PM

Lot-Sample No.: J5C160275-2

Report No. : 28402

Received Date: 3/16/2005 12:30:00 PM

Client Sample ID: B1CF65

COC No. : F05-009-079

Matrix: SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 5076485	UI50_IE_PLATE_AEA		Work Order: G6CW81AA		Report DB ID: 9G6CW810							
U-234	7.78E-01		1.28E-01	1.90E-01	4.79E-02	pCi/g	57%	(16.3)	3/24/05 10:24 p		2.02	ALP3
							1.70E-02	1.00E+00			G	
U-235	3.20E-02	U	2.76E-02	2.82E-02	3.54E-02	pCi/g	57%	0.9	3/24/05 10:24 p		2.02	ALP3
							1.07E-02	1.00E+00			G	
U-238	7.82E-01		1.28E-01	1.93E-01	4.23E-02	pCi/g	57%	(18.7)	3/24/05 10:24 p		2.02	ALP3
							1.42E-02	1.00E+00			G	
Ratio U-234/238 = 1.0												
Batch: 5076486	TC99_ETVDSK_LSC		Work Order: G6CW81AC		Report DB ID: 9G6CW810							
TC-99	4.78E-02	U	2.73E-01	3.85E-01	6.64E-01	pCi/g	100%	0.07	3/25/05 09:00 a		2.0	LSC4
							3.19E-01	1.50E+01			G	

No. of Results: 4 Comments:

STL Richland MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
 rptSTLRchSample U Qual - Analyzed for, but the result is less than the Mdc/Mda|Total Uncert or gamma scan software did not identify the nuclide.
 V4.11 A97

FORM I

Date: 29-Mar-05

SAMPLE RESULTS

Lab Name: STL Richland
 Lot-Sample No.: J5C160275-3
 Client Sample ID: B1CF67

SDG: W04589
 Report No.: 28402
 COC No.: F05-009-081

Collection Date: 3/9/2005 8:20:00 AM
 Received Date: 3/16/2005 12:30:00 PM
 Matrix: SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 5076485	UIISO_IE_PLATE_AEA				Work Order: G6CXC1AA		Report DB ID: 9G6CXC10					
U-234	8.41E-01		1.26E-01	1.96E-01	4.15E-02	pCi/g	64%	(20.2)	3/24/05 10:25 p		2.05	ALP4
							1.45E-02	1.00E+00			G	
U-235	5.47E-02		3.38E-02	3.52E-02	3.62E-02	pCi/g	64%	(1.5)	3/24/05 10:25 p		2.05	ALP4
							1.18E-02	1.00E+00			G	
U-238	8.66E-01		1.27E-01	2.01E-01	3.81E-02	pCi/g	64%	(22.7)	3/24/05 10:25 p		2.05	ALP4
							1.28E-02	1.00E+00			G	
Ratio U-234/238 = 1.0												
Batch: 5076486	TC99_ETVDSK_LSC				Work Order: G6CXC1AC		Report DB ID: 9G6CXC10					
TC-99	4.90E-03	U	2.70E-01	3.80E-01	6.52E-01	pCi/g	100%	0.01	3/25/05 11:04 a		2.0	LSC4
							3.14E-01	1.50E+01			G	

No. of Results: 4 Comments:

STL Richland MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
 rptSTLRchSample U Qual - Analyzed for, but the result is less than the Mdc/Mda|Total Uncert or gamma scan software did not identify the nuclide.
 V4.11 A97

FORM I
SAMPLE RESULTS

Date: 29-Mar-05

Lab Name: STL Richland
Lot-Sample No.: J5C160275-4
Client Sample ID: B1CF68

SDG: W04589
Report No. : 28402
COC No. : F05-009-082

Collection Date: 3/9/2005 9:05:00 AM
Received Date: 3/16/2005 12:30:00 PM
Matrix: SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Count Qual Error (2 s)	Total Uncert(2 s)	MDC MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 5076485	UIISO_IE_PLATE_AEA		Work Order: G6CXJ1AA		Report DB ID: 9G6CXJ10						
U-234	1.68E+00	1.89E-01	3.60E-01	5.07E-02	pCi/g	54%	(33.2)	3/24/05 10:25 p		2.05	ALP5
						1.82E-02	1.00E+00			G	
U-235	6.64E-02	3.81E-02	4.00E-02	2.98E-02	pCi/g	54%	(2.2)	3/24/05 10:25 p		2.05	ALP5
						7.76E-03	1.00E+00			G	
U-238	1.77E+00	1.94E-01	3.77E-01	5.07E-02	pCi/g	54%	(34.9)	3/24/05 10:25 p		2.05	ALP5
						1.82E-02	1.00E+00			G	
<i>Ratio U-234/238 = 0.9</i>											
Batch: 5076486	TC99_ETVDSK_LSC		Work Order: G6CXJ1AC		Report DB ID: 9G6CXJ10						
TC-99	-2.46E-01 U	2.61E-01	3.67E-01	6.53E-01	pCi/g	100%	-0.38	3/25/05 01:09 p		2.0	LSC4
						3.14E-01	1.50E+01			G	

No. of Results: 4 Comments:

STL Richland MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
rptSTLRchSample U Qual - Analyzed for, but the result is less than the Mdc/Mda|Total Uncert or gamma scan software did not identify the nuclide.
V4.11 A97

FORM I

Date: 29-Mar-05

SAMPLE RESULTS

Lab Name: STL Richland

SDG: W04589

Collection Date: 3/9/2005 9:30:00 AM

Lot-Sample No.: J5C160275-5

Report No.: 28402

Received Date: 3/16/2005 12:30:00 PM

Client Sample ID: B1CF69

COC No.: F05-009-083

Matrix: SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 5076485	UI50_IE_PLATE_AEA		Work Order: G6CXL1AA		Report DB ID: 9G6CXL10							
U-234	4.43E+00		2.83E-01	8.39E-01	2.55E-02	pCi/g	66%	(173.9)	3/24/05 10:25 p		2.0	ALP6
							6.63E-03	1.00E+00			G	
U-235	1.75E-01		5.63E-02	6.44E-02	2.16E-02	pCi/g	66%	(8.1)	3/24/05 10:25 p		2.0	ALP6
							4.69E-03	1.00E+00			G	
U-238	4.46E+00		2.83E-01	8.44E-01	2.16E-02	pCi/g	66%	(206.4)	3/24/05 10:25 p		2.0	ALP6
							4.69E-03	1.00E+00			G	
Ratio U-234/238 = 1.0												
Batch: 5076486	TC99_ETVDSK_LSC		Work Order: G6CXL1AC		Report DB ID: 9G6CXL10							
TC-99	-2.77E-01	U	2.60E-01	3.66E-01	6.53E-01	pCi/g	100%	-0.42	3/25/05 02:11 p		2.0	LSC4
							3.14E-01	1.50E+01			G	

No. of Results: 4 Comments:

STL Richland MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
 rptSTLRchSample U Qual - Analyzed for, but the result is less than the Mdc/Mda|Total Uncert or gamma scan software did not identify the nuclide.
 V4.11 A97

FORM I
SAMPLE RESULTS

Date: 29-Mar-05

Lab Name: STL Richland
Lot-Sample No.: J5C160275-6
Client Sample ID: B1CF70

SDG: W04589
Report No.: 28402
COC No.: F05-009-084

Collection Date: 3/8/2005 3:30:00 PM
Received Date: 3/16/2005 12:30:00 PM
Matrix: SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 5076485	UI50_JE_PLATE_AEA		Work Order: G6CXN1AA		Report DB ID: 9G6CXN10							
U-234	4.16E-01		1.03E-01	1.30E-01	1.74E-02	pCi/g	47%	(24.)	3/24/05 10:26 p		2.03	ALP7
							1.00E+00	(6.4)			G	
U-235	6.41E-03	U	1.28E-02	1.29E-02	1.74E-02	pCi/g	47%	0.37	3/24/05 10:26 p		2.03	ALP7
							1.00E+00	1.			G	
U-238	4.61E-01		1.09E-01	1.39E-01	1.74E-02	pCi/g	47%	(26.6)	3/24/05 10:26 p		2.03	ALP7
							1.00E+00	(6.6)			G	
<i>Ratio U-234/238 = 0.9</i>												
Batch: 5076486	TC99_ETVDSK_LSC		Work Order: G6CXN1AC		Report DB ID: 9G6CXN10							
TC-99	2.33E-01	U	2.78E-01	3.93E-01	6.55E-01	pCi/g	100%	0.36	3/25/05 03:13 p		2.0	LSC4
							3.15E-01	1.50E+01			G	

No. of Results: 4 Comments:

STL Richland MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
rptSTLRchSample U Qual - Analyzed for, but the result is less than the Mdc/Mda|Total Uncert or gamma scan software did not identify the nuclide.
V4.11 A97

FORM I
SAMPLE RESULTS

Date: 29-Mar-05

Lab Name: STL Richland
Lot-Sample No.: J5C160275-7
Client Sample ID: B1CF71

SDG: W04589
Report No.: 28402
COC No.: F05-009-085

Collection Date: 3/9/2005 12:07:00 PM
Received Date: 3/16/2005 12:30:00 PM
Matrix: SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 5076485	UI50_IE_PLATE_AEA		Work Order: G6CXQ1AA			Report DB ID: 9G6CXQ10						
U-234	5.72E-01		1.03E-01	1.45E-01	1.26E-02	pCi/g	66% 1.00E+00	(45.4) (7.9)	3/24/05 10:26 p		2.0 G	ALP9
U-235	2.79E-02		2.28E-02	2.33E-02	1.26E-02	pCi/g	66% 1.00E+00	(2.2) (2.4)	3/24/05 10:26 p		2.0 G	ALP9
U-238	6.17E-01		1.07E-01	1.54E-01	2.23E-02	pCi/g	66% 4.84E-03 1.00E+00	(27.7) (8.)	3/24/05 10:26 p		2.0 G	ALP9
<i>Ratio U-234/238 = 0.9</i>												
Batch: 5076486	TC99_ETVDSK_LSC		Work Order: G6CXQ1AC			Report DB ID: 9G6CXQ10						
TC-99	3.31E-02	U	2.70E-01	3.81E-01	6.48E-01	pCi/g	100% 3.11E-01 1.50E+01	0.05 0.17	3/25/05 04:16 p		2.0 G	LSC4

No. of Results: 4 Comments:

STL Richland MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
rptSTLRchSample U Qual - Analyzed for, but the result is less than the Mdc/Mda|Total Uncert or gamma scan software did not identify the nuclide.
V4.11 A97

FORM I
SAMPLE RESULTS

Date: 29-Mar-05

Lab Name: STL Richland
Lot-Sample No.: J5C160275-8
Client Sample ID: B1CF87

SDG: W04589
Report No.: 28402
COC No.: F05-009-101

Collection Date: 3/9/2005 2:30:00 PM
Received Date: 3/16/2005 12:30:00 PM
Matrix: SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 5076485	UI50_IE_PLATE_AEA		Work Order: G6CXR1AA			Report DB ID: 9G6CXR10						
U-234	5.97E-01		9.74E-02	1.43E-01	1.08E-02	pCi/g	76% 1.00E+00	(55.4) (8.3)	3/24/05 10:26 p		2.04 G	ALP10
U-235	2.70E-02		2.11E-02	2.16E-02	1.90E-02	pCi/g	76% 4.14E-03 1.00E+00	(1.4) (2.5)	3/24/05 10:26 p		2.04 G	ALP10
U-238	6.28E-01		1.00E-01	1.49E-01	1.90E-02	pCi/g	76% 4.14E-03 1.00E+00	(32.9) (8.4)	3/24/05 10:26 p		2.04 G	ALP10
<i>Ratio U-234/238 = 1.0</i>												
Batch: 5076486	TC99_ETVDSK_LSC		Work Order: G6CXR1AC			Report DB ID: 9G6CXR10						
TC-99	-2.91E-01	U	2.58E-01	3.64E-01	6.48E-01	pCi/g	100% 3.11E-01 1.50E+01	-0.45 -(1.6)	3/25/05 05:18 p		2.0 G	LSC4

No. of Results: 4 Comments:

STL Richland MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
rptSTLRchSample U Qual - Analyzed for, but the result is less than the Mdc/Mda|Total Uncert or gamma scan software did not identify the nuclide.
V4.11 A97

FORM I

Date: 29-Mar-05

SAMPLE RESULTS

Lab Name: STL Richland
 Lot-Sample No.: J5C160275-9
 Client Sample ID: B1CFC3

SDG: W04589
 Report No.: 28402
 COC No.: F05-009-125

Collection Date: 3/11/2005 2:30:00 PM
 Received Date: 3/16/2005 12:30:00 PM
 Matrix: SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 5076485	UI50_IE_PLATE_AEA		Work Order: G6CXT1AA		Report DB ID: 9G6CXT10							
U-234	6.69E-01		1.01E-01	1.55E-01	1.83E-02	pCi/g	72%	(36.5)	3/24/05 10:26 p		2.01	ALP11
							3.98E-03	1.00E+00	(8.6)		G	
U-235	3.83E-03	U	7.66E-03	7.69E-03	1.04E-02	pCi/g	72%	0.37	3/24/05 10:26 p		2.01	ALP11
							1.00E+00	1.			G	
U-238	6.47E-01		9.96E-02	1.51E-01	1.04E-02	pCi/g	72%	(62.4)	3/24/05 10:26 p		2.01	ALP11
							1.00E+00	(8.6)			G	
Ratio U-234/238 = 1.0												
Batch: 5076486	TC99_ETVDSK_LSC		Work Order: G6CXT1AC		Report DB ID: 9G6CXT10							
TC-99	2.86E-01	U	2.84E-01	3.99E-01	6.73E-01	pCi/g	100%	0.42	3/25/05 06:20 p		2.0	LSC4
							3.24E-01	1.50E+01	(1.4)		G	

No. of Results: 4 Comments:

STL Richland MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
 rptSTLRchSample U Qual - Analyzed for, but the result is less than the Mdc/Mda|Total Uncert or gamma scan software did not identify the nuclide.
 V4.11 A97

FORM I
SAMPLE RESULTS

Date: 29-Mar-05

Lab Name: **STL Richland**
Lot-Sample No.: **J5C160275-10**
Client Sample ID: **B1CFC4**

SDG: **W04589**
Report No. : **28402**
COC No. : **F05-009-126**

Collection Date: **3/11/2005 9:10:00 AM**
Received Date: **3/16/2005 12:30:00 PM**
Matrix: **SOIL**

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 5076485	UISO_IE_PLATE_AEA				Work Order: G8CXV1AA		Report DB ID: 9G6CXV10					
U-234	6.00E-01		9.53E-02	1.42E-01	1.81E-02	pCi/g	79%	(33.2)	3/24/05 10:27 p		2.06	ALP12
							3.93E-03	1.00E+00			G	
U-235	3.78E-03	U	7.56E-03	7.59E-03	1.02E-02	pCi/g	79%	0.37	3/24/05 10:27 p		2.06	ALP12
							1.00E+00	1.			G	
U-238	5.03E-01		8.72E-02	1.24E-01	1.02E-02	pCi/g	79%	(49.1)	3/24/05 10:27 p		2.06	ALP12
							1.00E+00	(8.1)			G	
<i>Ratio U-234/238 = 1.2</i>												
Batch: 5076486	TC99_ETVDSK_LSC				Work Order: G6CXV1AC		Report DB ID: 9G6CXV10					
TC-99	9.93E-01		2.91E-01	3.92E-01	6.26E-01	pCi/g	100%	(1.6)	3/24/05 10:03 p		2.0	LSC6
							3.00E-01	1.50E+01			G	

No. of Results: 4 Comments:

STL Richland MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
rptSTLRchSample U Qual - Analyzed for, but the result is less than the Mdc/Mda|Total Uncert or gamma scan software did not identify the nuclide.
V4.11 A97

FORM I
SAMPLE RESULTS

Date: 29-Mar-05

Lab Name: STL Richland
Lot-Sample No.: J5C160275-11
Client Sample ID: B1CFC5

SDG: W04589
Report No.: 28402
COC No.: F05-009-127

Collection Date: 3/11/2005 12:10:00 PM
Received Date: 3/16/2005 12:30:00 PM
Matrix: SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 5076485	UI50_IE_PLATE_AEA		Work Order: G6CXW1AA		Report DB ID: 9G6CXW10							
U-234	8.11E-01		1.23E-01	1.91E-01	1.27E-02	pCi/g	65%	(63.8)	3/24/05 10:28 p		2.07	ALP65
							1.00E+00	(8.5)			G	
U-235	2.31E-02		2.10E-02	2.14E-02	1.89E-02	pCi/g	65%	(1.2)	3/24/05 10:28 p		2.07	ALP65
							3.09E-03	1.00E+00			G	
U-238	7.50E-01		1.19E-01	1.80E-01	1.27E-02	pCi/g	65%	(59.)	3/24/05 10:28 p		2.07	ALP65
							1.00E+00	(8.4)			G	
<i>Ratio U-234/238 = 1.1</i>												
Batch: 5076486	TC99_ETVDSK_LSC		Work Order: G6CXW1AC		Report DB ID: 9G6CXW10							
TC-99	3.55E-01	U	2.71E-01	3.58E-01	6.29E-01	pCi/g	100%	0.56	3/24/05 11:06 p		2.0	LSC6
							3.02E-01	1.50E+01			G	

No. of Results: 4 Comments:

STL Richland MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
rptSTLRchSample U Qual - Analyzed for, but the result is less than the Mdc/Mda|Total Uncert or gamma scan software did not identify the nuclide.
V4.11 A97

FORM I
SAMPLE RESULTS

Date: 29-Mar-05

Lab Name: STL Richland
Lot-Sample No.: J5C160275-12
Client Sample ID: B1CFC6

SDG: W04589
Report No.: 28402
COC No.: F05-009-128

Collection Date: 3/14/2005 10:45:00 AM
Received Date: 3/16/2005 12:30:00 PM
Matrix: SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 5076485	UI50_JE_PLATE_AEA		Work Order: G6CXX1AA			Report DB ID: 9G6CXX10						
U-234	2.06E+00		1.76E-01	4.02E-01	2.06E-02	pCi/g	76%	(99.7)	3/24/05 10:28 p		2.03	ALP69
							5.08E-03	1.00E+00			G	
U-235	8.82E-02		3.70E-02	4.01E-02	1.76E-02	pCi/g	76%	(5.)	3/24/05 10:28 p		2.03	ALP69
							3.59E-03	1.00E+00			G	
U-238	1.62E+00		1.58E-01	3.24E-01	2.18E-02	pCi/g	76%	(74.1)	3/24/05 10:28 p		2.03	ALP69
							5.88E-03	1.00E+00			G	
<i>Ratio U-234/238 = 1.3</i>												
Batch: 5076486	TC99_ETVDSK_LSC		Work Order: G6CXX1AC			Report DB ID: 9G6CXX10						
TC-99	1.56E+00		3.09E-01	4.25E-01	6.27E-01	pCi/g	100%	(2.5)	3/25/05 12:08 a		2.0	LSC6
							3.01E-01	1.50E+01			G	

No. of Results: 4 Comments:

STL Richland MDC|MDA, Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
rptSTLRchSample U Qual - Analyzed for, but the result is less than the Mdc/Mda|Total Uncert or gamma scan software did not identify the nuclide.
V4.11 A97

FORM I
SAMPLE RESULTS

Date: 29-Mar-05

Lab Name: **STL Richland**
Lot-Sample No.: **J5C160275-13**
Client Sample ID: **B1CFC7**

SDG: **W04589**
Report No. : **28402**
COC No. : **F05-009-129**

Collection Date: **3/14/2005 1:00:00 PM**
Received Date: **3/16/2005 12:30:00 PM**
Matrix: **SOIL**

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 5076485	UI50_IE_PLATE_AEA		Work Order: G6CX51AA		Report DB ID: 9G6CX510							
U-234	6.33E-01		1.00E-01	1.50E-01	2.24E-02	pCi/g	78%	(28.2)	3/24/05 10:29 p		2.01	ALP71
							5.84E-03	1.00E+00			G	
U-235	2.71E-02		2.10E-02	2.16E-02	1.81E-02	pCi/g	78%	(1.5)	3/24/05 10:29 p		2.01	ALP71
							3.69E-03	1.00E+00			G	
U-238	4.81E-01		8.77E-02	1.22E-01	2.73E-02	pCi/g	78%	(17.6)	3/24/05 10:29 p		2.01	ALP71
							8.26E-03	1.00E+00			G	
<i>Ratio U-234/238 = 1.3</i>												
Batch: 5076486	TC99_ETVDSK_LSC		Work Order: G6CX51AC		Report DB ID: 9G6CX510							
TC-99	6.67E-02	U	2.61E-01	3.41E-01	6.30E-01	pCi/g	100%	0.11	3/25/05 01:10 a		2.0	LSC6
							3.03E-01	1.50E+01			G	

No. of Results: 4 Comments:

STL Richland MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
rptSTLRchSample U Qual - Analyzed for, but the result is less than the Mdc/Mda|Total Uncert or gamma scan software did not identify the nuclide.
V4.11 A97

FORM I

Date: 29-Mar-05

SAMPLE RESULTS

Lab Name: STL Richland

SDG: W04589

Collection Date: 3/10/2005 9:20:00 AM

Lot-Sample No.: J5C160275-14

Report No.: 28402

Received Date: 3/16/2005 12:30:00 PM

Client Sample ID: B1CFC8

COC No.: F05-009-130

Matrix: SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUncert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 5076485	UI50_IE_PLATE_AEA		Work Order: G6CX81AA		Report DB ID: 9G6CX810							
U-234	1.69E+00		1.81E-01	3.55E-01	1.32E-02	pCi/g	61%	(128.)	3/24/05 10:29 p		2.05	ALP72
							1.00E+00	(9.5)			G	
U-235	7.75E-02		3.90E-02	4.14E-02	1.96E-02	pCi/g	61%	(4.)	3/24/05 10:29 p		2.05	ALP72
							3.21E-03	1.00E+00			G	
U-238	1.78E+00		1.86E-01	3.71E-01	1.32E-02	pCi/g	61%	(134.7)	3/24/05 10:29 p		2.05	ALP72
							1.00E+00	(9.6)			G	
<i>Ratio U-234/238 = 1.0</i>												
Batch: 5076486	TC99_ETVDSK_LSC		Work Order: G6CX81AC		Report DB ID: 9G6CX810							
TC-99	3.44E-02	U	2.59E-01	3.39E-01	6.29E-01	pCi/g	100%	0.05	3/25/05 02:12 a		2.0	LSC6
							3.02E-01	1.50E+01			G	

No. of Results: 4 Comments:

STL Richland MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
 rptSTLRchSample U Qual - Analyzed for, but the result is less than the Mdc/Mda|Total Uncert or gamma scan software did not identify the nuclide.
 V4.11 A97

FORM I

Date: 29-Mar-05

SAMPLE RESULTS

Lab Name: STL Richland
 Lot-Sample No.: J5C160275-15
 Client Sample ID: B1CFC9

SDG: W04589
 Report No.: 28402
 COC No.: F05-009-131

Collection Date: 3/10/2005 12:31:00 PM
 Received Date: 3/16/2005 12:30:00 PM
 Matrix: SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 5076485	UI50_IE_PLATE_AEA		Work Order: G6C0A1AA		Report DB ID: 9G6C0A10							
U-234	7.41E-01		1.09E-01	1.70E-01	1.84E-02	pCi/g	80%	(40.2)	3/24/05 10:29 p		2.0	ALP83
							3.75E-03	1.00E+00	(8.7)		G	
U-235	3.13E-02		2.28E-02	2.35E-02	2.01E-02	pCi/g	80%	(1.6)	3/24/05 10:29 p		2.0	ALP83
							4.60E-03	1.00E+00	(2.7)		G	
U-238	7.78E-01		1.12E-01	1.77E-01	1.09E-02	pCi/g	80%	(71.2)	3/24/05 10:29 p		2.0	ALP83
							1.00E+00	(8.8)			G	
<i>Ratio U-234/238 = 1.0</i>												
Batch: 5076486	TC99_ETVDSK_LSC		Work Order: G6C0A1AC		Report DB ID: 9G6C0A10							
TC-99	-8.58E-02	U	2.54E-01	3.32E-01	6.25E-01	pCi/g	100%	-0.14	3/25/05 03:14 a		2.0	LSC6
							3.00E-01	1.50E+01	-0.52		G	

No. of Results: 4 Comments:

STL Richland MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
 rptSTLRchSample U Qual - Analyzed for, but the result is less than the Mdc/Mda|Total Uncert or gamma scan software did not identify the nuclide.
 V4.11 A97

FORM I
SAMPLE RESULTS

Date: 29-Mar-05

Lab Name: STL Richland
Lot-Sample No.: J5C160275-16
Client Sample ID: B1CFD0

SDG: W04589
Report No.: 28402
COC No.: F05-009-132

Collection Date: 3/10/2005 2:50:00 PM
Received Date: 3/16/2005 12:30:00 PM
Matrix: SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 5076485	UI50_IE_PLATE_AEA		Work Order: G6C0D1AA		Report DB ID: 9G6C0D10							
U-234	8.95E-01		1.23E-01	2.00E-01	2.87E-02	pCi/g	72%	(31.2)	3/25/05 06:57 a		2.05	ALP1
							8.70E-03	1.00E+00			G	
U-235	2.68E-02		2.23E-02	2.28E-02	2.64E-02	pCi/g	72%	(1.)	3/25/05 06:57 a		2.05	ALP1
							7.53E-03	1.00E+00			G	
U-238	7.96E-01		1.16E-01	1.82E-01	2.64E-02	pCi/g	72%	(30.2)	3/25/05 06:57 a		2.05	ALP1
							7.53E-03	1.00E+00			G	
<i>Ratio U-234/238 = 1.1</i>												
Batch: 5076486	TC99_ETVDSK_LSC		Work Order: G6C0D1AC		Report DB ID: 9G6C0D10							
TC-99	3.53E-01	U	2.71E-01	3.58E-01	6.33E-01	pCi/g	100%	0.56	3/25/05 04:16 a		2.0	LSC6
							3.04E-01	1.50E+01			G	

No. of Results: 4 Comments:

STL Richland MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
rptSTLRchSample U Qual - Analyzed for, but the result is less than the Mdc/Mda|Total Uncert or gamma scan software did not identify the nuclide.
V4.11 A97

FORM I
SAMPLE RESULTS

Date: 29-Mar-05

Lab Name: STL Richland
Lot-Sample No.: J5C160275-18
Client Sample ID: B1CFD2

SDG: W04589
Report No.: 28402
COC No.: F05-009-134

Collection Date: 3/10/2005 4:00:00 PM
Received Date: 3/16/2005 12:30:00 PM
Matrix: SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 5076485	UI50_IE_PLATE_AEA		Work Order: G6C0L1AA		Report DB ID: 9G6C0L10							
U-234	6.04E+00		3.19E-01	1.12E+00	4.28E-02	pCi/g	68%	(141.1)	3/25/05 06:57 a		2.07	ALP3
							1.57E-02	1.00E+00			G	
U-235	2.90E-01		7.03E-02	8.71E-02	3.09E-02	pCi/g	68%	(9.4)	3/25/05 06:57 a		2.07	ALP3
							9.76E-03	1.00E+00			G	
U-238	4.86E+00		2.86E-01	9.08E-01	3.90E-02	pCi/g	68%	(124.7)	3/25/05 06:57 a		2.07	ALP3
							1.38E-02	1.00E+00			G	
<i>Ratio U-234/238 = 1.2</i>												
Batch: 5076486	TC99_ETVDSK_LSC		Work Order: G6C0L1AC		Report DB ID: 9G6C0L10							
TC-99	4.36E-01	U	2.73E-01	3.62E-01	6.28E-01	pCi/g	100%	0.69	3/25/05 06:21 a		2.0	LSC6
							3.02E-01	1.50E+01			G	

No. of Results: 4 Comments:

STL Richland MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
rptSTLRchSample U Qual - Analyzed for, but the result is less than the Mdc/Mda|Total Uncert or gamma scan software did not identify the nuclide.
V4.11 A97

FORM I
SAMPLE RESULTS

Date: 29-Mar-05

Lab Name: STL Richland
Lot-Sample No.: J5C160275-19
Client Sample ID: B1CFD3

SDG: W04589
Report No.: 28402
COC No.: F05-009-135

Collection Date: 3/10/2005 9:20:00 AM
Received Date: 3/16/2005 12:30:00 PM
Matrix: SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 5076485	UI50_IE_PLATE_AEA		Work Order: G6C0M1AA			Report DB ID: 9G6C0M10						
U-234	1.68E+00		1.56E-01	3.31E-01	3.12E-02	pCi/g	82%	(53.8)	3/25/05 06:57 a		2.05	ALP4
							1.07E-02	1.00E+00	(10.1)		G	
U-235	4.64E-02		2.74E-02	2.85E-02	2.83E-02	pCi/g	82%	(1.6)	3/25/05 06:57 a		2.05	ALP4
							9.24E-03	1.00E+00	(3.3)		G	
U-238	1.83E+00		1.64E-01	3.59E-01	3.70E-02	pCi/g	82%	(49.5)	3/25/05 06:57 a		2.05	ALP4
							1.36E-02	1.00E+00	(10.2)		G	
<i>Ratio U-234/238 = 0.9</i>												
Batch: 5076486	TC99_ETVDSK_LSC		Work Order: G6C0M1AC			Report DB ID: 9G6C0M10						
TC-99	3.34E-01	U	2.69E-01	3.56E-01	6.27E-01	pCi/g	100%	0.53	3/25/05 07:23 a		2.0	LSC6
							3.01E-01	1.50E+01	(1.9)		G	

No. of Results: 4 Comments:

STL Richland MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
rptSTLRchSample U Qual - Analyzed for, but the result is less than the Mdc/Mda|Total Uncert or gamma scan software did not identify the nuclide.
V4.11 A97

FORM II

Date: 29-Mar-05

DUPLICATE RESULTS

Lab Name: STL Richland

SDG: W04589

Collection Date: 3/8/2005 12:15:00 PM

Lot-Sample No.: J5C160275-1

Report No. : 28402

Received Date: 3/16/2005 12:30:00 PM

Client Sample ID: B1CF64 DUP

COC No. : F05-009-078

Matrix: SOIL

Parameter	Result, Orig Rst	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC MDA, Action Lev	Rpt Unit, CRDL	Yield	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 5076485	UIISO_IE_PLATE_AEA		Work Order: G6CW51AD		Report DB ID: G6CW51DR		Orig Sa DB ID: 9G6CW510					
U-234	7.03E-01		1.23E-01	1.78E-01	2.57E-02	pCi/g	56%	(27.3)	3/24/05 10:24 p		2.06	ALP2
	6.00E-01		RPD 15.8			1.00E+00		(7.9)			G	
U-235	2.15E-02	U	2.15E-02	2.19E-02	1.46E-02	pCi/g	56%	(1.5)	3/24/05 10:24 p		2.06	ALP2
	4.43E-02		RPD 69.3			1.00E+00		(2.)			G	
U-238	6.41E-01		1.18E-01	1.66E-01	3.69E-02	pCi/g	56%	(17.4)	3/24/05 10:24 p		2.06	ALP2
	5.59E-01		RPD 13.7			1.00E+00		(7.7)			G	
Ratio U-234/238 = 1.1								Alpha Spec Result Sum = 1.4E+00				

No. of Results: 3 Comments:

STL Richland

RPD - Relative Percent Difference.

rptSTLRchDupV4.1
1 A97

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for, but the result is less than the Mdc/Mda|Total Uncert or gamma scan software did not identify the nuclide.

FORM II

Date: 29-Mar-05

DUPLICATE RESULTS

Lab Name: STL Richland
 Lot-Sample No.: J5C160275-2
 Client Sample ID: B1CF65 DUP

SDG: W04589
 Report No.: 28402
 COC No.: F05-009-079

Collection Date: 3/9/2005 2:30:00 PM
 Received Date: 3/16/2005 12:30:00 PM
 Matrix: SOIL

Parameter	Result, Orig Rst	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC MDA, Action Lev	Rpt Unit, CRDL	Yield	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 5076486	TC99_ETVDSK_LSC				Work Order: G6CW81AD	Report DB ID: G6CW81DR			Orig Sa DB ID: 9G6CW810			
TC-99	-1.52E-01	U	2.66E-01	3.73E-01	6.59E-01	pCi/g	100%	-0.23	3/25/05 10:02 a		2.0	LSC4
	4.78E-02	U	RPD	-384.5		1.50E+01		-0.81			G	

No. of Results: 1 Comments:

STL Richland RPD - Relative Percent Difference.
 rptSTLRchDupV4.1 MDC|MDA,Le - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
 1 A97 U Qual - Analyzed for, but the result is less than the Mdc/Mda|Total Uncert or gamma scan software did not identify the nuclide.

FORM II
BLANK RESULTS

Date: 29-Mar-05

Lab Name: STL Richland

SDG: W04589

Matrix: SOIL

Report No. : 28402

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC MDA	Rpt Unit, CRDL	Yield	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 5076485			UIISO_IE_PLATE_AEA		Work Order: G6GV81AA		Report DB ID: G6GV81AB					
U-234	6.26E-04	U	9.60E-03	9.60E-03	2.80E-02	pCi/g	93%	0.02	3/25/05 06:57 a		2.0	ALP5
					9.75E-03	1.00E+00		0.13			G	
U-235	-1.25E-03	U	1.77E-03	1.78E-03	1.77E-02	pCi/g	93%	-0.07	3/25/05 06:57 a		2.0	ALP5
					4.60E-03	1.00E+00		-(1.4)			G	
U-238	-3.75E-03	U	7.50E-03	7.53E-03	3.00E-02	pCi/g	93%	-0.12	3/25/05 06:57 a		2.0	ALP5
					1.08E-02	1.00E+00		-1.			G	
Ratio U-234/238 = -0.2												
Batch: 5076486			TC99_ETVDSK_LSC		Work Order: G6GWF1AA		Report DB ID: G6GWF1AB					
TC-99	2.43E-01	U	2.67E-01	3.51E-01	6.30E-01	pCi/g	100%	0.39	3/25/05 08:25 a		2.0	LSC6
					3.03E-01	2.00E+01		(1.4)			G	

No. of Results: 4 Comments:

STL Richland MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
 rptSTLRchBlank U Qual - Analyzed for, but the result is less than the Mdc/Mda|Total Uncert or gamma scan software did not identify the nuclide.
 V4.11 A97

FORM II
LCS RESULTS

Date: 29-Mar-05

Lab Name: STL Richland

SDG: W04589

Matrix: SOIL

Report No. : 28402

Parameter	Result	Count Qual	Count Error (2 s)	Total Uncert(2 s)	MDC MDA	Report Unit	Yield	Expected	Expected Uncert	Recovery, Bias	Analysis, Prep Date	Aliquot Size	Primary Detector
Batch: 5076485	UIISO_IE_PLATE_AEA		Work Order: G6GV81AC		Report DB ID: G6GV81CS								
U-234	1.64E+00		1.49E-01	3.21E-01	1.91E-02	pCi/g	88%	1.65E+00	1.01E-02	100%	3/25/05 06:57 a	2.0	ALP6
							Rec Limits:	70	130	0.0		G	
U-238	1.75E+00		1.54E-01	3.39E-01	1.62E-02	pCi/g	88%	1.73E+00	1.06E-02	101%	3/25/05 06:57 a	2.0	ALP6
							Rec Limits:	70	130	0.0		G	
Batch: 5076486	TC99_ETVDSK_LSC		Work Order: G6GWF1AC		Report DB ID: G6GWF1CS								
TC-99	1.82E+02		1.85E+00	1.06E+01	6.28E-01	pCi/g	100%	2.26E+02	2.87E+00	80%	3/25/05 10:30 a	2.0	LSC6
							Rec Limits:	70	130	-0.2		G	

No. of Results: 3 Comments:

FORM II
MATRIX SPIKE RESULTS

Date: 29-Mar-05

Lab Name: STL Richland

SDG: W04589

Lot-Sample No.: J5C160275-3

Report No.: 28402

Matrix: SOIL

Parameter	SpikeResult, Orig Rst	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC MDA	Rpt Unit, CRDL	Yield	Rec- overy	Exp- ected	Exp Uncert	Analysis, Prep Date	Allquot Size	Primary Detector
Batch: 5076486	TC99_ETVDSK_LSC			Work Order: G6CXC1AD		Report DB ID: G6CXC1DW		Orig Sa DB ID: 9G6CXC10					
TC-99	1.72E+02		1.81E+00	1.02E+01	6.55E-01	pCi/g	100%	76.08%	2.27E+02	1.87E+01	3/25/05 12:07 p	2.0	LSC4
	4.90E-03	RPD	33.8									G	

No. of Results: 1 Comments:

STL Richland RER - Replicate Error Ratio = (S-D)/[sqrt(sq(TPUs)+sq(TPuD))] as defined by ICPT BOA.
 rptSTLRchMs Bias - (Result/Expected)-1 as defined by ANSI N13.30.
 V4.11 A97

Lot No., Due Date: J5C160275; 03/31/2005
 Client, Site: 108302; FLUOR- SOILS Hanford Site
 QC Batch No., Method Test: 5076485; RUIISO Also by ALP
 SDG, Matrix: W04589; SOIL

1.0 COC

1.1 Is the ICOC page complete; includes all applicable analysis, dates, SOP numbers, and revisions? Yes No N/A

2.0 QC Batch

2.1 Do the Summary/Detailed Reports include a calculated result for each sample listed on the QC Batch Sheet? Yes No N/A

2.2 Are the QC appropriate for the analysis included in the batch? Yes No N/A

2.3 Is the Analytical Batch Worksheet complete; includes as appropriate, volumes, count times, etc? Yes No N/A

2.4 Does the Worksheets include a Tracer Vial label for each sample? Yes No N/A

3.0 QC & Samples

3.1 Is the blank results, yield, and MDA within contract limits? Yes No N/A

3.2 Is the LCS result, yield, and MDA within contract limits? Yes No N/A

3.3 Are the MS/MSD results, yields, and MDA within contract limits? Yes No N/A

3.4 Are the duplicate result, yields, and MDAs within contract limits? Yes No N/A

3.5 Are the sample yields and MDAs within contract limits? Yes No N/A

4.0 Raw Data

4.1 Were results calculated in the correct units? Yes No N/A

4.2 Were analysis volumes entered correctly? Yes No N/A

4.3 Were Yields entered correctly? Yes No N/A

4.4 Were spectra reviewed/meet contractual requirements? Yes No N/A

4.5 Were raw counts reviewed for anomalies? Yes No N/A

5.0 Other

5.1 Are all nonconformances included and noted? Yes No N/A

5.2 Are all required forms filled out? Yes No N/A

5.3 Was the correct methodology used? Yes No N/A

5.4 Was transcription checked? Yes No N/A

5.5 Were all calculations checked at a minimum frequency? Yes No N/A

5.6 Are worksheet entries complete and correct? Yes No N/A

6.0 Comments on any No response:

First Level Review Pam Anderson

Date 3-28-05



STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

OC Batch Number: 5076485

Review Item	Yes (✓)	No (✓)	N/A (✓)
A. Sample Analysis			
1. Are the sample yields within acceptance criteria?	✓		
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?	✓		
3. Are the correct isotopes reported?	✓		
B. QC Samples			
1. Is the Minimum Detectable Activity for the blank result ≤ the Contract Detection Limit?	✓		
2. Does the blank result meet the Contract criteria?	✓		
3. Is the blank result < the Contract Detection Limit?	✓		
4. Is the blank result > the Contract Detection Limit but the sample result < the Contract Detection Limit?			✓
5. Is the LCS recovery with contract acceptance criteria?	✓		
7. Is the LCS Minimum Detectable Activity ≤ the Contract Detection Limit?	✓		
8. Do the MS/MSD results and yields meet acceptance criteria?			✓
9. Do the duplicate sample results and yields meet acceptance criteria?	✓		
C. Other			
1. Are all Nonconformances included and noted?			✓
2. Are all required forms filled out?	✓		
3. Was the correct methodology used?	✓		
4. Was transcription checked?	✓		
5. Were all calculations checked at a minimum frequency?	✓		
6. Were units checked?	✓		

Comments on any "No" response: _____

Second Level Review: Julie Waddell Date: 3/29/05

Lot No., Due Date: J5C160275; 03/31/2005
 Client, Site: 108302; FLUOR- SOILS Hanford Site
 QC Batch No., Method Test: 5076486; RTC99 Tc-99 by LSC
 SDG, Matrix: W04589; SOIL

1.0 COC

1.1 Is the ICOC page complete; includes all applicable analysis, dates, SOP numbers, and revisions? Yes No N/A

2.0 QC Batch

2.1 Do the Summary/Detailed Reports include a calculated result for each sample listed on the QC Batch Sheet? Yes No N/A

2.2 Are the QC appropriate for the analysis included in the batch? Yes No N/A

2.3 Is the Analytical Batch Worksheet complete; includes as appropriate, volumes, count times, etc? Yes No N/A

2.4 Does the Worksheets include a Tracer Vial label for each sample? Yes No N/A

3.0 QC & Samples

3.1 Is the blank results, yield, and MDA within contract limits? Yes No N/A

3.2 Is the LCS result, yield, and MDA within contract limits? Yes No N/A

3.3 Are the MS/MSD results, yields, and MDA within contract limits? Yes No N/A

3.4 Are the duplicate result, yields, and MDAs within contract limits? Yes No N/A

3.5 Are the sample yields and MDAs within contract limits? Yes No N/A

4.0 Raw Data

4.1 Were results calculated in the correct units? Yes No N/A

4.2 Were analysis volumes entered correctly? Yes No N/A

4.3 Were Yields entered correctly? Yes No N/A

4.4 Were spectra reviewed/meet contractual requirements? Yes No N/A

4.5 Were raw counts reviewed for anomalies? Yes No N/A

5.0 Other

5.1 Are all nonconformances included and noted? Yes No N/A

5.2 Are all required forms filled out? Yes No N/A

5.3 Was the correct methodology used? Yes No N/A

5.4 Was transcription checked? Yes No N/A

5.5 Were all calculations checked at a minimum frequency? Yes No N/A

5.6 Are worksheet entries complete and correct? Yes No N/A

6.0 Comments on any No response:

First Level Review Pam Anderson

Date 3-29-05



STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

OC Batch Number: 5076486

Review Item	Yes (✓)	No (✓)	N/A (✓)
A. Sample Analysis			
1. Are the sample yields within acceptance criteria?			✓
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?	✓		
3. Are the correct isotopes reported?	✓		
B. QC Samples			
1. Is the Minimum Detectable Activity for the blank result ≤ the Contract Detection Limit?	✓		
2. Does the blank result meet the Contract criteria?	✓		
3. Is the blank result < the Contract Detection Limit?	✓		
4. Is the blank result > the Contract Detection Limit but the sample result < the Contract Detection Limit?			✓
5. Is the LCS recovery with contract acceptance criteria?	✓		
7. Is the LCS Minimum Detectable Activity ≤ the Contract Detection Limit?	✓		
8. Do the MS/MSD results and yields meet acceptance criteria?	✓		
9. Do the duplicate sample results and yields meet acceptance criteria?	✓		
C. Other			
1. Are all Nonconformances included and noted?			✓
2. Are all required forms filled out?	✓		
3. Was the correct methodology used?	✓		
4. Was transcription checked?	✓		
5. Were all calculations checked at a minimum frequency?	✓		
6. Were units checked?	✓		

Comments on any "No" response: _____

Second Level Review: Justine Waddell Date: 3/29/05

Q-50039

Fluor Hanford Inc.		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		F05-009-078	PAGE 1 OF 1
COLLECTOR POPE/PFISTER/MOKLER/TYRA	COMPANY CONTACT JACKSON, RL	TELEPHONE NO. 372-9004	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8B	DATA TURNAROUND 7 Days / 15 Days
SAMPLING LOCATION 216-U-8 : C4714 44ft - 46ft	PROJECT DESIGNATION U Plant Closure Contaminant Plume Refinement	SAF NO. F05-009	AIR QUALITY <input type="checkbox"/>		
ICE CHEST NO.	FIELD LOGBOOK NO. HUF-N-439	COA 119141ES10	METHOD OF SHIPMENT GOVERNMENT VEHICLE		
SHIPPED TO Severn Trent Incorporated, Richland	OFFSITE PROPERTY NO. NO 1 Box 1 MAB 3/1/05	BILL OF LADING/AIR BILL NO. N/A			

MATRIX* A=Air DL=Drum Liquids DS=Drum Solids L=Liquid O=Oil S=Soil SE=Sediment T=Tissue V=Vegetation W=Water WI=Wipe X=Other	POSSIBLE SAMPLE HAZARDS/ REMARKS Rad to 44 ft BICF51	PRESERVATION None							
		TYPE OF CONTAINER aG							
		NO. OF CONTAINER(S) 1							
		VOLUME 60mL							
	SPECIAL HANDLING AND/OR STORAGE	SAMPLE ANALYSIS Isotopic Lithium Technetium-99 Ce-137 95-98							

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME						
BICF64	G6CW5 SOIL	3-8-05	1215	X					

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM <i>J. POPE</i>	DATE/TIME 3-8-05 1700	RECEIVED BY/STORED IN <i>M. 026/REF.#1</i>	DATE/TIME 3-8-05 1700
RELINQUISHED BY/REMOVED FROM <i>IND-026 PR36 #1</i>	DATE/TIME 3/16/05 1035	RECEIVED BY/STORED IN <i>R. Pfister/R. M. J.</i>	DATE/TIME 3/16/05 1035
RELINQUISHED BY/REMOVED FROM <i>R. Pfister/R. M. J.</i>	DATE/TIME 3/16/05 1228	RECEIVED BY/STORED IN <i>M. J. M. J.</i>	DATE/TIME 3/16/05 1230
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS

** The STL-RL laboratory is to achieve a detection limit of 1 pCi/gm for Tc-99.
 ** The STL laboratories will close SDGs upon accumulation of 5 samples or at a minimum weekly.

J5C160275
SDH W04589
Due 3/23/05

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

Fluor Hanford Inc.		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST				F05-009-079	PAGE 1 OF 1	
COLLECTOR POPE/PFISTER/MOKLER/TYRA		COMPANY CONTACT JACKSON, RL		TELEPHONE NO. 372-9004	PROJECT COORDINATOR TRENT, SJ		PRICE CODE BB	DATA TURNAROUND
SAMPLING LOCATION 216-U-8 ; 14715 44ft - 46ft		PROJECT DESIGNATION U Plant Closure Contaminant Plume Refinement			SAF NO. F05-009	AIR QUALITY <input type="checkbox"/>	7 Days / 15 Days	
ICE CHEST NO.		FIELD LOGBOOK NO. HNF-U-4391	COA 119141ES10	METHOD OF SHIPMENT GOVERNMENT VEHICLE				
SHIPPED TO Severn Trent Incorporated, Richland		OFFSITE PROPERTY NO. N/A			BILL OF LADING/AIR BILL NO. N/A			
MATRIX* A=Air DL=Drum Liquids DS=Drum Solids L=Liquid O=Oil S=Soil SE=Sediment T=Tissue V=Vegetation W=Water WI=Wipe X=Other	POSSIBLE SAMPLE HAZARDS/ REMARKS		PRESERVATION None	TYPE OF CONTAINER eG	NO. OF CONTAINER(S) 1	VOLUME 60ml	SPECIAL HANDLING AND/OR STORAGE	
		SAMPLE ANALYSIS		Isotopic Uranium Technetium-99; Zinc Uranium 2500				
SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME					
B1CF65	G6CW8 SOIL	3-9-05	1430	X				
CHAIN OF POSSESSION				SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	** The STL-RL laboratory is to achieve a detection limit of 1 pCi/gm for Tc-99.				
JSPope/Aghw	3-9-05 1700	M0-026/ROE #1	3-9-05 1700	** The STL laboratories will close SDGs upon accumulation of 5 samples or at a minimum weekly.				
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME					
MU-026/ROE #1	3-16-05 1035	S-S-Pope/Aghw	7-16-05 1035					
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME					
JSPope/Aghw	3-16-05 1230	J. J. J. J.	3-16-05 1230					
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME					
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME					
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME					
LABORATORY SECTION	RECEIVED BY	TITLE			DATE/TIME			
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY			DATE/TIME			

Fluor Hanford Inc.		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST				F05-009-081	PAGE 1	OF 1	
COLLECTOR POPE/PFISTER/MOKLER/TYRA		COMPANY CONTACT JACKSON, RL		TELEPHONE NO. 372-9004		PROJECT COORDINATOR TRENT, SJ		PRICE CODE 88	DATA TURNAROUND
SAMPLING LOCATION 216-U-8 ; C4717 1ft-3ft		PROJECT DESIGNATION U Plant Closure Contaminant Plume Refinement				SAF NO. F05-009		AIR QUALITY <input type="checkbox"/>	7 Days / 15 Days
ICE CHEST NO.		FIELD LOGBOOK NO. HNF-D-4391		COA 119141E510		METHOD OF SHIPMENT GOVERNMENT VEHICLE			
SHIPPED TO Severn Trent Incorporated, Richland		OFFSITE PROPERTY NO. N/A				BILL OF LADING/AIR BILL NO. N/A			
MATRIX* A=Air DL=Drum Liquids DS=Drum Solids L=Liquid O=Oil S=Soil SE=Sediment T=Tissue V=Vegetation W=Water WI=Wipe X=Other	POSSIBLE SAMPLE HAZARDS/ REMARKS		PRESERVATION None						
			TYPE OF CONTAINER eG						
			NO. OF CONTAINER(S) 1						
			VOLUME 60ml						
SPECIAL HANDLING AND/OR STORAGE		SAMPLE ANALYSIS		Isotopic Uranium; Technetium-99; Plutonium-239; Plutonium-240					
SAMPLE NO.		MATRIX*		SAMPLE DATE		SAMPLE TIME			
BICF67 G-6CXC		SOIL		3-9-05		0620		X	
CHAIN OF POSSESSION				SIGN/ PRINT NAMES				SPECIAL INSTRUCTIONS	
RELINQUISHED BY/REMOVED FROM		DATE/TIME		RECEIVED BY/STORED IN		DATE/TIME		** The STL-RL laboratory is to achieve a detection limit of 1 pCi/gm for Tc-99. ** The STL laboratories will close SDGs upon accumulation of 5 samples or at a minimum weekly.	
J. Pope / A. Tyra		3-9-05 1700		MO-026 / Ref #1		3-9-05 1700			
RELINQUISHED BY/REMOVED FROM		DATE/TIME		RECEIVED BY/STORED IN		DATE/TIME			
MO-026 BRIG #1		3/16/05 1050		RECEIVED BY/STORED IN		3/16/05 1050			
RELINQUISHED BY/REMOVED FROM		DATE/TIME		RECEIVED BY/STORED IN		DATE/TIME			
R. Pfister / M. Tyra		3/16/05 1226		RECEIVED BY/STORED IN		3/16/05 1230			
RELINQUISHED BY/REMOVED FROM		DATE/TIME		RECEIVED BY/STORED IN		DATE/TIME			
RELINQUISHED BY/REMOVED FROM		DATE/TIME		RECEIVED BY/STORED IN		DATE/TIME			
RELINQUISHED BY/REMOVED FROM		DATE/TIME		RECEIVED BY/STORED IN		DATE/TIME			
LABORATORY SECTION		RECEIVED BY				TITLE		DATE/TIME	
FINAL SAMPLE DISPOSITION		DISPOSAL METHOD				DISPOSED BY		DATE/TIME	

Fluor Hanford Inc.

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F05-009-082

PAGE 1 OF 1

COLLECTOR POPE/PFISTER/MOKLER/TYRA	COMPANY CONTACT JACKSON, RI	TELEPHONE NO. 372-9004	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 88	DATA TURNAROUND 7 Days / 15 Days
SAMPLING LOCATION 216-U-8 ; 04717 37ft-39ft	PROJECT DESIGNATION U Plant Closure Contaminant Plume Refinement		SAF NO. F05-009	AIR QUALITY <input type="checkbox"/>	
ICE CHEST NO.	FIELD LOGBOOK NO. HUF-N-4391	COA 119141E510	METHOD OF SHIPMENT GOVERNMENT VEHICLE		
SHIPPED TO Severn Trent Incorporated, Richland	OFFSITE PROPERTY NO. N/A		BILL OF LADING/AIR BILL NO. N/A		

MATRIX* A=Air DL=Drum Liquids DS=Drum Solids L=Liquid O=Oil S=Soil SE=Sediment T=Tissue V=Vegetation W=Water WI=Wipe X=Other	POSSIBLE SAMPLE HAZARDS/ REMARKS	PRESERVATION None									
		TYPE OF CONTAINER	g								
		NO. OF CONTAINER(S)	1								
	SPECIAL HANDLING AND/OR STORAGE	SAMPLE ANALYSIS Isotopic Uranium, Technetium-99, Total Uranium 8/2/05	VOLUME 60ml								

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME							
B1CF68	G6CXJ SOIL	3-9-05	0905	X						

CHAIN OF POSSESSION				SIGN/ PRINT NAMES				SPECIAL INSTRUCTIONS			
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME					** The STL-RL laboratory is to achieve a detection limit of 1 pCi/gm for Tc-99. ** The STL laboratories will close SDGs upon accumulation of 5 samples or at a minimum weekly.			
J. Pope / J. Tyra	3-9-05 1700	M. 026 / Ref #1	3-9-05 1700								
M. 026 / FR16 #1	3/16/05 1045	R. Pfister / J. Tyra	3/16/05 1045								
R. Pfister / M. 026	3/16/05 1220	J. Tyra	3/16/05 1230								
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME								
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME								

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

Fluor Hanford Inc.

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F05-009-083

PAGE 1 OF 1

COLLECTOR
POPE/PFISTER/MOKLER/TYRA

COMPANY CONTACT
JACKSON, RL

TELEPHONE NO.
372-9004

PROJECT COORDINATOR
TRENT, SJ

PRICE CODE 88

DATA
TURNAROUND

SAMPLING LOCATION
216-U-8 ; 04717 44Pt-46A
ICE CHEST NO.

PROJECT DESIGNATION
U Plant Closure Contaminant Plume Refinement

SAF NO.
F05-009

AIR QUALITY

7 Days / 15
Days

FIELD LOGBOOK NO.
HWF-N-439 1

COA
119141ES10

METHOD OF SHIPMENT
GOVERNMENT VEHICLE

SHIPPED TO
Severn Trent Incorporated, Richland

OFFSITE PROPERTY NO.
N/A

BILL OF LADING/AIR BILL NO.
N/A

MATRIX*
A=Air
DL=Drum
L=Liquids
DS=Drum
S=Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS

PRESERVATION None

TYPE OF CONTAINER aG

NO. OF CONTAINER(S) 1

VOLUME 60ml

SPECIAL HANDLING AND/OR STORAGE

SAMPLE ANALYSIS

Isotope:
Technique: 99
Tc-99
3-8-05

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME										
BICF69	G6CXL SOIL	3-9-05	0930	X									

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM J. POPE / A. TYRA	DATE/TIME 3-9-05 1700	RECEIVED BY/STORED IN M0-026/KCF #1	DATE/TIME 3-9-05 1700
RELINQUISHED BY/REMOVED FROM M0-026 FRIG #1	DATE/TIME 3/16/05 1045	RECEIVED BY/STORED IN R. PFISTER / R. MOKLER	DATE/TIME 3/16/05 1045
RELINQUISHED BY/REMOVED FROM R. PFISTER / R. MOKLER	DATE/TIME 3/16/05 1228	RECEIVED BY/STORED IN [Signature]	DATE/TIME 3/16/05 1230
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS
 ** The STL-RL laboratory is to achieve a detection limit of 1 pCi/gm for Tc-99.
 ** The STL laboratories will close SDGs upon accumulation of 5 samples or at a minimum weekly.

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

Fluor Hanford Inc.

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F05-009-084

PAGE 1 OF 1

COLLECTOR
POPE/PFISTER/MOKLER/TYRA

COMPANY CONTACT
JACKSON, RL

TELEPHONE NO.
372-9004

PROJECT COORDINATOR
TRENT, SJ

PRICE CODE 88

DATA
TURNAROUND

SAMPLING LOCATION
216-U-8 ; C4718 44ft-46ft
ICE CHEST NO.

PROJECT DESIGNATION
U Plant Closure Contaminant Plume Refinement

SAF NO.
F05-009

AIR QUALITY

7 Days / 15
Days

FIELD LOGBOOK NO.
HNF-U-4391
COA
119141E510

METHOD OF SHIPMENT
GOVERNMENT VEHICLE

SHIPPED TO
Severn Trent Incorporated, Richland

OFFSITE PROPERTY NO.
N/A

BILL OF LADING/AIR BILL NO.
N/A

MATRIX*
A=Air
DL=Drum
Liquids
DS=Drum
Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS

Rad to B1CF57

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION

None

TYPE OF CONTAINER

4G

NO. OF CONTAINER(S)

1

VOLUME

60mL

SAMPLE ANALYSIS

Isotopic
Uranium
Technetium-99;
Plutonium-239
AP 3-8-05

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME						
B1CF70	G-60XN SOIL	3-8-05	1530	X					

CHAIN OF POSSESSION

SIGN/ PRINT NAMES

SPECIAL INSTRUCTIONS

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
JSP/PAPE/STW	3-8-05 1700	MU-026/RCF #1	3-8-05 1700
MO-026 FRIG #1	3/16/05 1035	R. PFISTER/PAPE	3/16/05 1035
R. PFISTER/PAPE	3/16/05 1228	AP 3-8-05	3-16-05 1228

** The STL-RL laboratory is to achieve a detection limit of 1 pCi/gm for Tc-99.
** The STL laboratories will close SDGs upon accumulation of 5 samples or at a minimum weekly.

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

Fluor Hanford Inc.		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST				F05-009-085	PAGE 1 OF 1
COLLECTOR POPE/PFISTER/MOKLER/TYRA		COMPANY CONTACT JACKSON, RL		TELEPHONE NO. 372-9004	PROJECT COORDINATOR TRENT, SJ		PRICE CODE 8B
SAMPLING LOCATION 216-U-8 ; C4719 44ft-46ft		PROJECT DESIGNATION U Plant Closure Contaminant Plume Refinement			SAF NO. F05-009	AIR QUALITY <input type="checkbox"/>	DATA TURNAROUND 7 Days / 15 Days
ICE CHEST NO.		FIELD LOGBOOK NO. HNF-N-4391	COA 119141ES10	METHOD OF SHIPMENT GOVERNMENT VEHICLE			
SHIPPED TO Severn Trent Incorporated, Richland		OFFSITE PROPERTY NO. N/A		BILL OF LADING/AIR BILL NO. N/A			
MATRIX* A=Air DL=Drum Liquids DS=Drum Solids L=Liquid O=Oil S=Soil SE=Sediment T=Tissue V=Vegetation W=Water WI=Wipe X=Other	POSSIBLE SAMPLE HAZARDS/ REMARKS	PRESERVATION None	TYPE OF CONTAINER aG	NO. OF CONTAINER(S) 1	VOLUME 60mL		
	SPECIAL HANDLING AND/OR STORAGE	SAMPLE ANALYSIS Isotopic Uranium, Technetium-99, Fission Uranium 98.200					
	SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
	BICF71 G6CXQ	SOIL	3-9-05	1207	X		
CHAIN OF POSSESSION		SIGN/ PRINT NAMES			SPECIAL INSTRUCTIONS		
RELINQUISHED BY/REMOVED FROM J. Spore / R. 3-9-05	DATE/TIME 1760	RECEIVED BY/STORED IN MO-026 / RCF #1	DATE/TIME 3-9-05	DATE/TIME 1700	** The STL-RL laboratory is to achieve a detection limit of 1 pCi/gm for Tc-99. ** The STL laboratories will close SDGs upon accumulation of 5 samples or at a minimum weekly.		
RELINQUISHED BY/REMOVED FROM MO-026 FRIG #1	DATE/TIME 3/16/05 1045	RECEIVED BY/STORED IN R. Pfister / RCF #1	DATE/TIME 3/16/05	DATE/TIME 1045			
RELINQUISHED BY/REMOVED FROM R. Pfister / RCF #1	DATE/TIME 3/16/05 1228	RECEIVED BY/STORED IN K. Hildeberg	DATE/TIME 3-16-05	DATE/TIME 1230			
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	DATE/TIME			
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	DATE/TIME			
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	DATE/TIME			
LABORATORY SECTION	RECEIVED BY	TITLE			DATE/TIME		
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY			DATE/TIME		

Fluor Hanford Inc.

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F05-009-101

PAGE 1 OF 1

COLLECTOR

POPE/PFISTER/MOKLER/TYRA

COMPANY CONTACT

JACKSON, RL

TELEPHONE NO.

372-9004

PROJECT COORDINATOR

TRENT, SJ

PRICE CODE 8B

DATA TURNAROUND

SAMPLING LOCATION

216-U-B ; (4715) 44ft-46ft

PROJECT DESIGNATION

U Plant Closure Contaminant Plume Refinement

SAF NO.

F05-009

AIR QUALITY

7 Days / 15 Days

ICE CHEST NO.

FIELD LOGBOOK NO.

HNF-N-439

COA

119141E510

METHOD OF SHIPMENT

GOVERNMENT VEHICLE

SHIPPED TO

Severn Trent Incorporated, Richland

OFFSITE PROPERTY NO.

N/A

BILL OF LADING/AIR BILL NO.

N/A

MATRIX*

A=Air
DL=Drum
Liquids
DS=Drum
Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS

PRESERVATION

None

TYPE OF CONTAINER

9G

NO. OF CONTAINER(S)

1

VOLUME

60mL

SPECIAL HANDLING AND/OR STORAGE

SAMPLE ANALYSIS

Isotopic
Uranium;
Technetium-99;
Total Uranium
3-8-05

SAMPLE NO.

MATRIX*

SAMPLE DATE

SAMPLE TIME

B1CF87 66CXR

SOIL

3-9-05

1430

L

CHAIN OF POSSESSION

SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM J.S. POPE/ASG 3-9-05	DATE/TIME 1700	RECEIVED BY/STORED IN MO-026/REF #1 3-9-05	DATE/TIME 1700
RELINQUISHED BY/REMOVED FROM MO-026/REF #1 3-16-05	DATE/TIME 1035	RECEIVED BY/STORED IN J.S. POPE/ASG 3-8-05	DATE/TIME 1035
RELINQUISHED BY/REMOVED FROM J.S. POPE/ASG 3-16-05	DATE/TIME 1230	RECEIVED BY/STORED IN [Signature] 3-16-05	DATE/TIME 1230
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS

** The STL-RL laboratory is to achieve a detection limit of 1 pCi/gm for Tc-99.
** The STL laboratories will dose SDGs upon accumulation of 5 samples or at a minimum weekly.

LABORATORY SECTION

RECEIVED BY

TITLE

DATE/TIME

FINAL SAMPLE DISPOSITION

DISPOSAL METHOD

DISPOSED BY

DATE/TIME

Fluor Hanford Inc.

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F05-009-125

PAGE 1 OF 1

COLLECTOR
POPE/PFISTER/MOKLER/TYRA

COMPANY CONTACT
JACKSON, RL

TELEPHONE NO.
372-9004

PROJECT COORDINATOR
TRENT, SJ

PRICE CODE 8B

DATA
TURNAROUND

SAMPLING LOCATION
216-U-12 ; 4728 44ft-46ft

PROJECT DESIGNATION
U Plant Closure Contaminant Plume Refinement

SAF NO.
F05-009

AIR QUALITY

7 Days / 15
Days

ICE CHEST NO.

FIELD LOGBOOK NO.

COA
119141ES10

METHOD OF SHIPMENT
GOVERNMENT VEHICLE

SHIPPED TO

Severn Trent Incorporated, Richland

OFFSITE PROPERTY NO.
N/A

BILL OF LADING/AIR BILL NO.
N/A

MATRIX*
A=Air
DL=Drum
Liquids
DS=Drum
Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS

PRESERVATION

None

TYPE OF CONTAINER

2G

NO. OF CONTAINER(S)

1

VOLUME

60mL

SPECIAL HANDLING AND/OR STORAGE

SAMPLE ANALYSIS

Isotopic
Uranium;
Technetium-99;
Total Uranium;
TMS 3-7-05

SAMPLE NO.

MATRIX*

SAMPLE DATE

SAMPLE TIME

B1CFC3 G6CXT SOIL

3/11/05 1430 X

CHAIN OF POSSESSION

SIGN/ PRINT NAMES

SPECIAL INSTRUCTIONS

RELINQUISHED BY/REMOVED FROM
R. PFISTER/Rediff 3/11/05 1530

RECEIVED BY/STORED IN
MO-026 FRIT (#) 3/11/05 1530

** The STL-RL laboratory is to achieve a detection limit of 1 pCi/gm for Tc-99.
** The STL laboratories will close SDGs upon accumulation of 5 samples or at a minimum weekly.

RELINQUISHED BY/REMOVED FROM
MO-026 FRIT # 3/16/05 1035

RECEIVED BY/STORED IN
R. PFISTER/Rediff 3/16/05 1035

RELINQUISHED BY/REMOVED FROM
R. PFISTER/Rediff 3/16/05 1228

RECEIVED BY/STORED IN
J. WILBERG 3-16-05 1230

RELINQUISHED BY/REMOVED FROM

RECEIVED BY/STORED IN

LABORATORY
SECTION

RECEIVED BY

TITLE

DATE/TIME

FINAL SAMPLE
DISPOSITION

DISPOSAL METHOD

DISPOSED BY

DATE/TIME

Fluor Hanford Inc.		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST				F05-009-126	PAGE 1 OF 1
COLLECTOR POPE/PFISTER/MOKLER/TYRA		COMPANY CONTACT JACKSON, RL		TELEPHONE NO. 372-9004	PROJECT COORDINATOR TRENT, SJ		PRICE CODE BB
SAMPLING LOCATION 216-U-12 ; 04724 44ft-46ft		PROJECT DESIGNATION U Plant Closure Contaminant Plume Refinement			SAF NO. F05-009		DATA TURNAROUND 7 Days / 15 Days
ICE CHEST NO.		FIELD LOGBOOK NO. HMF-N-4391	COA 119141E510		METHOD OF SHIPMENT GOVERNMENT VEHICLE		
SHIPPED TO Seyern Trent Incorporated, Richland		OFFSITE PROPERTY NO. N/A		BILL OF LADING/AIR BILL NO. N/A			
MATRIX* A=Air DL=Drum Liquids DS=Drum Solids L=Liquid O=Oil S=Soil SE=Sediment T=Tissue V=Vegetation W=Water WI=Wipe X=Other	POSSIBLE SAMPLE HAZARDS/ REMARKS	PRESERVATION None	TYPE OF CONTAINER 2G	NO. OF CONTAINER(S) 1	VOLUME 60ml	SPECIAL HANDLING AND/OR STORAGE	
		SAMPLE ANALYSIS Isotopic Uranium; Technetium-99; Cesium-137 TMO 3-7-05					
SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME				
B1CF04 G6CXV	SOIL	3/11/05	0910	X			
CHAIN OF POSSESSION		SIGN/ PRINT NAMES			SPECIAL INSTRUCTIONS		
RELINQUISHED BY/REMOVED FROM R. PEISTER / R. P. [Signature]	DATE/TIME 3/11/05 1530	RECEIVED BY/STORED IN MO-026 FR16 #7	DATE/TIME 3/11/05 1530	** The STL-RL laboratory is to achieve a detection limit of 1 pCi/gm for Tc-99. ** The STL laboratories will close SDGs upon accumulation of 5 samples or at a minimum weekly.			
RELINQUISHED BY/REMOVED FROM MO-026 FR16 #1	DATE/TIME 3/16/05 1035	RECEIVED BY/STORED IN R. PEISTER / R. P. [Signature]	DATE/TIME 3/16/05 1035				
RELINQUISHED BY/REMOVED FROM R. PEISTER / R. P. [Signature]	DATE/TIME 3/16/05 1228	RECEIVED BY/STORED IN [Signature]	DATE/TIME 3/16/05 1230				
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME				
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME				
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME				
LABORATORY SECTION	RECEIVED BY	TITLE		DATE/TIME			
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY		DATE/TIME			

Fluor Hanford Inc.		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST				F05-009-127	PAGE 1 OF 1
COLLECTOR POPE/PFISTER/MOKLER/TYRA		COMPANY CONTACT JACKSON, RI		TELEPHONE NO. 372-9004	PROJECT COORDINATOR TRENT, SJ		PRICE CODE 88 DATA TURNAROUND 7 Days / 15 Days
SAMPLING LOCATION 216-U-12 ; 14725 44ft-46ft		PROJECT DESIGNATION U Plant Closure Contaminant Plume Refinement			SAF NO. F05-009	AIR QUALITY <input type="checkbox"/>	
ICE CHEST NO.		FIELD LOGBOOK NO. HNF-N-4391	COA 119141E510	METHOD OF SHIPMENT GOVERNMENT VEHICLE			
SHIPPED TO Severn Trent Incorporated, Richland		OFFSITE PROPERTY NO. N/A			BILL OF LADING/AIR BILL NO. N/A		
MATRIX* A=Air DL=Drum Liquids DS=Drum Solids L=Liquid O=Oil S=Soil SE=Sediment T=Tissue V=Vegetation W=Water WI=Wipe X=Other	POSSIBLE SAMPLE HAZARDS/ REMARKS	PRESERVATION None	TYPE OF CONTAINER aG	NO. OF CONTAINER(S) 1	VOLUME 60ml	SAMPLE ANALYSIS Isotopic Uranium; Technetium-99; Cesium-137; TmJ 3-7-05	
SPECIAL HANDLING AND/OR STORAGE							
SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME				
B1CFC5	G6CXW SOIL	3/11/05	1210	X			
CHAIN OF POSSESSION		SIGN/ PRINT NAMES			SPECIAL INSTRUCTIONS		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	** The STL-RL laboratory is to achieve a detection limit of 1 pCi/gm for Tc-99.			
R. PFISTER / R. MOKLER	3/11/05 1530	M. OZEL (REC #1)	3/11/05 1530	** The STL laboratories will close SDGs upon accumulation of 5 samples or at a minimum weekly.			
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME				
M. OZEL / REC # 1	3-16-05 1035	J. POPE / J. TYRA	3-16-05 1035				
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME				
J. POPE / J. TYRA	3-16-05 1230	J. POPE / J. TYRA	3-16-05 1230				
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME				
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME				
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME				
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME				
LABORATORY SECTION	RECEIVED BY	TITLE		DATE/TIME			
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY		DATE/TIME			

Fluor Hanford Inc.

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F05-009-128

PAGE 1 OF 1

COLLECTOR
POPE/PFISTER/MOKLER/TYRA

COMPANY CONTACT
JACKSON, RL

TELEPHONE NO.
372-9004

PROJECT COORDINATOR
TRENT, SJ

PRICE CODE 8B

DATA
TURNAROUND

SAMPLING LOCATION
216-U-12 (C4726 44ft-46 FT)

PROJECT DESIGNATION
U Plant Closure Contaminant Plume Refinement

SAF NO.
F05-009

AIR QUALITY

7 Days / 15
Days

ICE CHEST NO.

FIELD LOGBOOK NO.
HNF-N-4391

COA
119141E510

METHOD OF SHIPMENT
GOVERNMENT VEHICLE

SHIPPED TO

Severn Trent Incorporated, Richland

OFFSITE PROPERTY NO.
N/A

BILL OF LADING/AIR BILL NO.
N/A

MATRIX*
A=Air
DL=Drum
Liquids
DS=Drum
Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS

PRESERVATION

None

TYPE OF CONTAINER

aG

NO. OF CONTAINER(S)

1

VOLUME

60mL

SPECIAL HANDLING AND/OR STORAGE

SAMPLE ANALYSIS

Isotopic
Uranium;
Technetium-99;
Thoron
TMS 3-7-05

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME																	
B1CFC6	G-6CXX SOIL	3-14-05	1045	X																

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
J.S. Pope / R. Tyra	3-14-05 1450	M. O'Leary / R. Tyra	3-14-05 1450
M. O'Leary / R. Tyra	3/16/05 1055	R. Pfister / R. Tyra	3/16/05 1055
R. Pfister / R. Tyra	3/16/05 1227	[Signature]	3/16/05 1230
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS

** The STL-RL laboratory is to achieve a detection limit of 1 pCi/gm for Tc-99.

** The STL laboratories will close SDGs upon accumulation of 5 samples or at a minimum weekly.

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

Fluor Hanford Inc.

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F05-009-129

PAGE 1 OF 1

COLLECTOR
POPE/PFISTER/MOKLER/TYRA

COMPANY CONTACT
JACKSON, RL

TELEPHONE NO.
372-9004

PROJECT COORDINATOR
TRENT, SJ

PRICE CODE BB

DATA
TURNAROUND

SAMPLING LOCATION
216-U-12 ; C4727 44ft-46ft
ICE CHEST NO.

PROJECT DESIGNATION
U Plant Closure Contaminant Plume Refinement

SAF NO.
F05-009

AIR QUALITY

7 Days / 15
Days

FIELD LOGBOOK NO.
HNF-N-4391

COA
119141E510

METHOD OF SHIPMENT
GOVERNMENT VEHICLE

SHIPPED TO
Severn Trent Incorporated, Richland

OFFSITE PROPERTY NO.
N/A

BILL OF LADING/AIR BILL NO.
N/A

MATRIX*
A=Air
DL=Drum
Liquids
DS=Drum
Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS

PRESERVATION

None

TYPE OF CONTAINER

9G

NO. OF CONTAINER(S)

1

VOLUME

60ml

SPECIAL HANDLING AND/OR STORAGE

SAMPLE ANALYSIS

Isotopic
Uranium;
Technetium-99;
Thallium-201;
Tl-201
3-7-05

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME															
B1CF07	G-6CX5 SOIL	3-14-05	1300	X														

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
J.S. POPE / ASH	3-14-05 1450	MU-226 / R.E. #1	3-14-05 1450
MU-226 / R.E. #1	3-16-05 1035	JANE / ASH	3-16-05 1035
J.S. POPE / ASH	3-16-05 1230	Mudberry	3-16-05 1230
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS
 ** The STL-RL laboratory is to achieve a detection limit of 1 pCi/gm for Tc-99.
 ** The STL laboratories will close SDGs upon accumulation of 5 samples or at a minimum weekly.

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

Fluor Hanford Inc.		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F05-009-130	PAGE 1 OF 1
COLLECTOR POPE/PFISTER/MOKLER/TYRA	COMPANY CONTACT JACKSON, RL	TELEPHONE NO. 372-9004	PROJECT COORDINATOR TRENT, SJ		PRICE CODE 88	DATA TURNAROUND
SAMPLING LOCATION 216-U-12	PROJECT DESIGNATION U Plant Closure Contaminant Plume Refinement	FIELD LOGBOOK NO. HNF-N-4391	COA 119141E510	SAF NO. F05-009	AIR QUALITY <input type="checkbox"/>	7 Days / 15 Days
ICE CHEST NO.	SHIPPED TO Severn Trent Incorporated, Richland	OFFSITE PROPERTY NO. N/A	METHOD OF SHIPMENT GOVERNMENT VEHICLE		BILL OF LADING/AIR BILL NO. N/A	

MATRIX*	POSSIBLE SAMPLE HAZARDS/ REMARKS	PRESERVATION	TYPE OF CONTAINER	NO. OF CONTAINER(S)	VOLUME	SAMPLE ANALYSIS
A=Air DL=Drum Liquids DS=Drum Solids L=Liquid O=Oil S=Soil SE=Sediment T=Tissue V=Vegetation W=Water WI=Wipe X=Other		None	aG	1	60ml	Isotopic Lithium; Technetium-99; Total-Aluminum TYS 3-7-05
	SPECIAL HANDLING AND/OR STORAGE					

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B1CFC8 G6CX8	SOIL	3-16-05	0920	X

CHAIN OF POSSESSION	SIGN/ PRINT NAMES
RELINQUISHED BY/REMOVED FROM R. PFISTER/REMOVED FROM	RECEIVED BY/STORED IN MO-026 FRIG #1
DATE/TIME 3/10/05 1730	DATE/TIME 3/10/05 1730
RELINQUISHED BY/REMOVED FROM MU-026/REF #1	RECEIVED BY/STORED IN SAFE/AGH
DATE/TIME 3-16-05 1035	DATE/TIME 3-16-05 1035
RELINQUISHED BY/REMOVED FROM SAFE/AGH	RECEIVED BY/STORED IN Huelshero
DATE/TIME 3-16-05 1230	DATE/TIME 3-16-05 1230
RELINQUISHED BY/REMOVED FROM	RECEIVED BY/STORED IN
DATE/TIME	DATE/TIME
RELINQUISHED BY/REMOVED FROM	RECEIVED BY/STORED IN
DATE/TIME	DATE/TIME
RELINQUISHED BY/REMOVED FROM	RECEIVED BY/STORED IN
DATE/TIME	DATE/TIME

SPECIAL INSTRUCTIONS

** The STL-RL laboratory is to achieve a detection limit of 1 pCi/gm for Tc-99.
 ** The STL laboratories will close SDGs upon accumulation of 5 samples or at a minimum weekly.

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

Fluor Hanford Inc.		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST				F05-009-131	PAGE 1 OF 1	
COLLECTOR POPE/PFISTER/MOKLER/TYRA		COMPANY CONTACT JACKSON, RL		TELEPHONE NO. 372-9004	PROJECT COORDINATOR TRENT, SJ		PRICE CODE 8B	
SAMPLING LOCATION 216-U-12 ; 04729 44FT-46FT		PROJECT DESIGNATION U Plant Closure Contaminant Plume Refinement			SAF NO. F05-009	AIR QUALITY <input type="checkbox"/>	DATA TURNAROUND 7 Days / 15 Days	
ICE CHEST NO.		FIELD LOGBOOK NO. HNF-N-4391	COA 119141E510		METHOD OF SHIPMENT GOVERNMENT VEHICLE			
SHIPPED TO Severn Trent Incorporated, Richland		OFFSITE PROPERTY NO. N/A			BILL OF LADING/AIR BILL NO. N/A			
MATRIX* A=Air DL=Drum Liquids DS=Drum Solids L=Liquid O=Oil S=Soil SE=Sediment T=Tissue V=Vegetation W=Water WI=Wipe X=Other	POSSIBLE SAMPLE HAZARDS/ REMARKS		PRESERVATION None	TYPE OF CONTAINER 2G	NO. OF CONTAINER(S) 1	VOLUME 60ml	SAMPLE ANALYSIS Isotopic Lithium; Technetium-99; Total Uranium TWS 3-7-05	
	SPECIAL HANDLING AND/OR STORAGE							
	SAMPLE NO.		MATRIX*	SAMPLE DATE	SAMPLE TIME			
	BICFC9	G6CDA SOIL	3-10-05	1231	X			
CHAIN OF POSSESSION			SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS			
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	** The STL-RL laboratory is to achieve a detection limit of 1 pCi/gm for Tc-99.				
R. Pfister / [Signature]	3/10/05 1730	MO-026 FRK #1	3/10/05 1730	** The STL laboratories will close SDGs upon accumulation of 5 samples or at a minimum weekly.				
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME					
MO-026/RCF #1	3-16-05 1035	JSAPE / [Signature]	3-16-05 1035					
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME					
JSAPE / [Signature]	3-16-05 1230	[Signature]	3-16-05 1230					
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME					
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME					
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME					
LABORATORY SECTION	RECEIVED BY	TITLE		DATE/TIME				
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY		DATE/TIME				

Fluor Hanford Inc.

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F05-009-132

PAGE 1 OF 1

COLLECTOR
POPE/PFISTER/MOKLER/TYRA

COMPANY CONTACT
JACKSON, RL

TELEPHONE NO.
372-9004

PROJECT COORDINATOR
TRENT, SJ

PRICE CODE 8B

DATA
TURNAROUND

SAMPLING LOCATION
216-U-12 ; (4730) 18PT-20FT
ICE CHEST NO.

PROJECT DESIGNATION
U Plant Closure Contaminant Plume Refinement

SAF NO.
F05-009

AIR QUALITY

7 Days / 15
Days

FIELD LOGBOOK NO.
HNF-N-4391

CDA
119141E510

METHOD OF SHIPMENT
GOVERNMENT VEHICLE

SHIPPED TO
Severn Trent Incorporated, Richland

OFFSITE PROPERTY NO.
N/A

BILL OF LADING/AIR BILL NO.
N/A

- MATRIX*
A=Air
DL=Drum
Liquids
DS=Drum
Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS

PRESERVATION None

TYPE OF CONTAINER 6G

NO. OF CONTAINER(S) 1

VOLUME 60ml

SPECIAL HANDLING AND/OR STORAGE

SAMPLE ANALYSIS
Isotopic
Uranium;
Technetium-99;
Thorium-230
TMS 3-7-05

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME						
B1CFD0	66COD SOIL	3/10/05	1450	X					

CHAIN OF POSSESSION	SIGN/ PRINT NAMES	DATE/TIME	DATE/TIME
RELINQUISHED BY/REMOVED FROM R. PEISTER / R. M. [Signature]	RECEIVED BY/STORED IN MO-026 FRIG #1	3/10/05 1730	3/10/05 1730
RELINQUISHED BY/REMOVED FROM MI-026 RCP #1	RECEIVED BY/STORED IN J. POPE / A. [Signature]	3-16-05 1035	3-16-05 1035
RELINQUISHED BY/REMOVED FROM J. POPE / A. [Signature]	RECEIVED BY/STORED IN [Signature]	3-16-05 1230	3/16/05 1230
RELINQUISHED BY/REMOVED FROM	RECEIVED BY/STORED IN	DATE/TIME	DATE/TIME
RELINQUISHED BY/REMOVED FROM	RECEIVED BY/STORED IN	DATE/TIME	DATE/TIME
RELINQUISHED BY/REMOVED FROM	RECEIVED BY/STORED IN	DATE/TIME	DATE/TIME

SPECIAL INSTRUCTIONS
 ** The STL-RL laboratory is to achieve a detection limit of 1 pCi/gm for Tc-99.
 ** The STL laboratories will dose SDGs upon accumulation of 5 samples or at a minimum weekly.

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

Fluor Hanford Inc.		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST				F05-009-133	PAGE 1	OF 1
COLLECTOR POPE/PFISTER/MOKLER/TYRA		COMPANY CONTACT JACKSON, RL		TELEPHONE NO. 372-9004	PROJECT COORDINATOR TRENT, SJ		PRICE CODE 88	DATA TURNAROUND
SAMPLING LOCATION 216-U-12 ; 4730 38FT-40FT		PROJECT DESIGNATION U Plant Closure Contaminant Plume Refinement			SAF NO. F05-009		AIR QUALITY <input type="checkbox"/>	7 Days / 15 Days
ICE CHEST NO.		FIELD LOGBOOK NO. HNF-N-4391		COA 119141ES10	METHOD OF SHIPMENT GOVERNMENT VEHICLE			
SHIPPED TO Severn Trent Incorporated, Richland		OFFSITE PROPERTY NO. N/A			BILL OF LADING/AIR BILL NO. N/A			
MATRIX* A=Air DL=Drum Liquids DS=Drum Solids L=Liquid O=Oil S=Soil SE=Sediment T=Tissue V=Vegetation W=Water WI=Wipe X=Other	POSSIBLE SAMPLE HAZARDS/ REMARKS		PRESERVATION None					
			TYPE OF CONTAINER 2G					
			NO. OF CONTAINER(S) 1					
			VOLUME 60mL					
	SPECIAL HANDLING AND/OR STORAGE		SAMPLE ANALYSIS Isotopic Uranium, Technetium-99, Total Uranium Th03-05					
SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME					
BICFD1	G6COH SOIL	3-10-05	15:35	X				
CHAIN OF POSSESSION				SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS		
RELINQUISHED BY/REMOVED FROM RPP/STB/2/2/05		DATE/TIME 3/10/05 1730	RECEIVED BY/STORED IN MB-026 FR/6 #1		DATE/TIME 3/10/05 1730	** The STL-RL laboratory is to achieve a detection limit of 1 pCi/gm for Tc-99. ** The STL laboratories will close SDGs upon accumulation of 5 samples or at a minimum weekly.		
RELINQUISHED BY/REMOVED FROM JSP/024/ACF #1		DATE/TIME 3-16-05 1035	RECEIVED BY/STORED IN JSP/024/ACF #1		DATE/TIME 3-16-05 1035			
RELINQUISHED BY/REMOVED FROM JSP/024/ACF #1		DATE/TIME 3-16-05 1230	RECEIVED BY/STORED IN JSP/024/ACF #1		DATE/TIME 3-16-05 1200			
RELINQUISHED BY/REMOVED FROM		DATE/TIME	RECEIVED BY/STORED IN		DATE/TIME			
RELINQUISHED BY/REMOVED FROM		DATE/TIME	RECEIVED BY/STORED IN		DATE/TIME			
RELINQUISHED BY/REMOVED FROM		DATE/TIME	RECEIVED BY/STORED IN		DATE/TIME			
LABORATORY SECTION	RECEIVED BY	TITLE			DATE/TIME			
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY			DATE/TIME			

Fluor Hanford Inc.

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F05-009-134

PAGE 1 OF 1

COLLECTOR
POPE/PFISTER/MOKLER/TYRA

COMPANY CONTACT
JACKSON, RL

TELEPHONE NO.
372-9004

PROJECT COORDINATOR
TRENT, SJ

PRICE CODE 88

DATA
TURNAROUND

SAMPLING LOCATION
216-U-12 ; (4780) 44FT-46FT

PROJECT DESIGNATION
U Plant Closure Contaminant Plume Refinement

SAF NO.
F05-009

AIR QUALITY

7 Days / 15
Days

ICE CHEST NO.

FIELD LOGBOOK NO.
HNF-N-4391

COA
119141ES10

METHOD OF SHIPMENT
GOVERNMENT VEHICLE

SHIPPED TO
Severn Trent Incorporated, Richland

OFFSITE PROPERTY NO.
N/A

BILL OF LADING/AIR BILL NO.
N/A

MATRIX*
A=Air
DL=Drum
Liquids
DS=Drum
Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS

PRESERVATION

None

TYPE OF CONTAINER

alG

NO. OF CONTAINER(S)

1

VOLUME

60ml

SPECIAL HANDLING AND/OR STORAGE

SAMPLE ANALYSIS

Isotopic
Uranium
Technetium-99;
Total Uranium
TUD 3-7-05

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME						
B1CFD2	G6COL SOIL	3/10/05	1600	X					

CHAIN OF POSSESSION

SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM P. PFISTER / [Signature]	DATE/TIME 3/10/05 1730	RECEIVED BY/STORED IN M0-02L FRIG #1	DATE/TIME 3/10/05 1730
RELINQUISHED BY/REMOVED FROM M0-02L RECH 1	DATE/TIME 3-16-05 1035	RECEIVED BY/STORED IN J. S. [Signature]	DATE/TIME 2-16-05 1035
RELINQUISHED BY/REMOVED FROM J. S. POPE / [Signature]	DATE/TIME 3-16-05 1230	RECEIVED BY/STORED IN [Signature]	DATE/TIME 3-16-05 1230
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS

** The STL-RL laboratory is to achieve a detection limit of 1 pCi/gm for Tc-99.
** The STL laboratories will close SDGs upon accumulation of 5 samples or at a minimum weekly.

LABORATORY
SECTION

RECEIVED BY

TITLE

DATE/TIME

FINAL SAMPLE
DISPOSITION

DISPOSAL METHOD

DISPOSED BY

DATE/TIME

Fluor Hanford Inc.

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F05-009-135

COLLECTOR
POPE/PFISTER/MOKLER/TYRA

COMPANY CONTACT
JACKSON, RI

TELEPHONE NO.
372-9004

PROJECT COORDINATOR
TRENT, SJ

PRICE CODE 8B

DATA
TURNAROUND

SAMPLING LOCATION
216-U-12 ; C4728 44FT-46FT
48'-50'
7-11-05

PROJECT DESIGNATION
U Plant Closure Contaminant Plume Refinement

SAF NO.
F05-009

AIR QUALITY

7 Days / 15
Days

ICE CHEST NO.

FIELD LOGBOOK NO.
HNF-N-439

COA
119141ES10

METHOD OF SHIPMENT
GOVERNMENT VEHICLE

SHIPPED TO
Severn Trent Incorporated, Richland

OFFSITE PROPERTY NO.
N/A

BILL OF LADING/AIR BILL NO.
N/A

MATRIX*
A=Air
DL=Drum
Liquids
DS=Drum
Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS

PRESERVATION

None

TYPE OF CONTAINER

2G

NO. OF CONTAINER(S)

1

VOLUME

60ml

SPECIAL HANDLING AND/OR STORAGE

SAMPLE ANALYSIS

Isotopic
Uranium,
Technetium-99;
Total Uranium
BYIS
3-7-05

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME
B1CFD3 G-6COM	SOIL	3-16-05	0920

PRESERVATION	TYPE OF CONTAINER	NO. OF CONTAINER(S)	VOLUME	SAMPLE ANALYSIS
None	2G	1	60ml	Isotopic Uranium, Technetium-99; Total Uranium BYIS 3-7-05

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
R. PFISTER / R. L. TYRA	3/16/05 1730	MO-026 FAIG #1	3/16/05 1730
M. J. TYRA / Ref #1	3-16-05 1635	J. POPE / J. TYRA	7-16-05 1635
J. POPE / J. TYRA	3-16-05 1230	M. HILLBERG	3-16-05 1230

SPECIAL INSTRUCTIONS

** The STL-RL laboratory is to achieve a detection limit of 1 pCi/gm for Tc-99.
 ** The STL laboratories will close SDGs upon accumulation of 5 samples or at a minimum weekly.

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME



STL

Sample Check-in List

Date/Time Received: 3-16 1230

Client: FUH SDG #: W04589 NA SAF #: F05-009 NA

Work Order Number: J5C160275 Chain of Custody # F05-009-078, 79, 81, 82, 83, 84, 85, 101, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135

Shipping Container ID: UNA Air Bill # UNA

1. Custody Seals on shipping container intact? NA Yes No
2. Custody Seals dated and signed? NA Yes No
3. Chain of Custody record present? Yes No
4. Cooler temperature: _____ NA 5. Vermiculite/packing materials is NA Wet Dry
6. Number of samples in shipping container: 19
7. Sample holding times exceeded? NA Yes No
8. Samples have:
 - tape
 - custody seals
 - hazard labels
 - appropriate samples labels
9. Samples are:
 - in good condition
 - broken
 - leaking
 - have air bubbles
 (Only for samples requiring head space)
10. Sample pH taken? NA pH<2 pH>2 pH>9
11. Sample Location, Sample Collector Listed? * Yes No
*For documentation only. No corrective action needed.
12. Were any anomalies identified in sample receipt? Yes No
13. Description of anomalies (include sample numbers): _____

Sample Custodian: Muddeberg Date: 3-16-05

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person contacted _____

No action necessary; process as is.

Project Manager _____ Date _____

3/18/2005 3:56:25 PM

Sample Preparation/Analysis

Balance Id:1120373922

108302, FLUOR HANFORD IC
Hanford Inc

Flour

7S Ulso PrpRC5013/205019, SepRC5029(5039)

5067
Oct 3-25-05

Pipet #:

Report Due: *03/21/2005*

3/25/05
in H 3/18/05

SR Uranium-234,235,238 by Alpha Spec

5I CLIENT: HANFORD

Sep1 DT/Tm Tech:

Batch: 5076485

SOIL

pCi/g

PM, Quote: BG2, 50639

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: HansenM

Work Order, Lot, Sample Date/Time	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 J5C160275-1-SAMP [REDACTED] 03/08/2005 12:15		2.02g,in	UITC12578 01/31/05.pd 10/12/04.r	<i>200</i>				
		AmtRec: 60G	#Containers: 1				Scr Rst: Alpha: 7.12E+01 pCi/g Beta: 1.75E+01 pCi/g	
2 J5C160275-1-DUP [REDACTED] 03/08/2005 12:15		2.06g,in	UITC12579 01/31/05.pd 10/12/04.r					
		AmtRec: 60G	#Containers: 1				Scr Rst: Alpha: 7.12E+01 pCi/g Beta: 1.75E+01 pCi/g	
3 J5C160275-2-SAMP [REDACTED] 03/09/2005 14:30		2.02g,in	UITC12580 01/31/05.pd 10/12/04.r					
		AmtRec: 60G	#Containers: 1				Scr Rst: Alpha: 7.08E+01 pCi/g Beta: 1.65E+01 pCi/g	
4 J5C160275-3-SAMP [REDACTED] 03/09/2005 08:20		2.05g,in	UITC12581 01/31/05.pd 10/12/04.r					
		AmtRec: 60G	#Containers: 1				Scr Rst: Alpha: 6.57E+01 pCi/g Beta: 1.62E+01 pCi/g	
5 J5C160275-4-SAMP [REDACTED] 03/09/2005 09:05		2.05g,in	UITC12582 01/31/05.pd 10/12/04.r					
		AmtRec: 60G	#Containers: 1				Scr Rst: Alpha: 1.35E+02 pCi/g Beta: 3.89E+01 pCi/g	
6 J5C160275-5-SAMP [REDACTED] 03/09/2005 09:30		2.00g,in	UITC12583 01/31/05.pd 10/12/04.r					
		AmtRec: 60G	#Containers: 1				Scr Rst: Alpha: 1.58E+02 pCi/g Beta: 4.23E+01 pCi/g	
7 J5C160275-6-SAMP [REDACTED] 03/08/2005 15:30		2.03g,in	UITC12584 01/31/05.pd 10/12/04.r					
		AmtRec: 60G	#Containers: 1				Scr Rst: Alpha: 6.57E+01 pCi/g Beta: 1.64E+01 pCi/g	

3/18/2005 3:56:27 PM

Sample Preparation/Analysis

Balance Id:1120373922

108302, FLUOR HANFORD IC
Hanford Inc

, Flour

7S Ulso PrpRC5013/RC6019, SepRC5079(5039)
SR Uranium-234,235,238 by Alpha Spec

Pipet #:

*5067
3-25-05*

Report Due: 03/31/2005

Sep1 DT/Tm Tech:

Batch: 5076485 SOIL pCi/g
SEO Batch, Test: None

PM, Quote: BG2, 50639

Sep2 DT/Tm Tech:

Prep Tech: HansenM

Work Order, Lot, Sample Date/Time	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
8 G6CXQ-1-AA J5C160275-7-SAMP [Barcode] 03/09/2005 12:07	2.00g,in	2.00g,in	UITC12585 01/31/05.pd 10/12/04.r	200				
							Scr Rst: Alpha: 4.64E+01 pCi/g Beta: 1.05E+01 pCi/g	
9 G6CXR-1-AA J5C160275-8-SAMP [Barcode] 03/09/2005 14:30	2.04g,in	2.04g,in	UITC12586 01/31/05.pd 10/12/04.r					
							Scr Rst: Alpha: 6.33E+01 pCi/g Beta: 1.77E+01 pCi/g	
10 G6CXT-1-AA J5C160275-9-SAMP [Barcode] 03/11/2005 14:30	2.01g,in	2.01g,in	UITC12587 01/31/05.pd 10/12/04.r					
							Scr Rst: Alpha: 4.37E+01 pCi/g Beta: 1.15E+01 pCi/g	
11 G6CXV-1-AA J5C160275-10-SAMP [Barcode] 03/11/2005 09:10	2.06g,in	2.06g,in	UITC12588 01/31/05.pd 10/12/04.r					
							Scr Rst: Alpha: 7.32E+01 pCi/g Beta: 1.71E+01 pCi/g	
12 G6CXW-1-AA J5C160275-11-SAMP [Barcode] 03/11/2005 12:10	2.07g,in	2.07g,in	UITC12589 01/31/05.pd 10/12/04.r					
							Scr Rst: Alpha: 8.50E+01 pCi/g Beta: 2.16E+01 pCi/g	
13 G6CXX-1-AA J5C160275-12-SAMP [Barcode] 03/14/2005 10:45	2.03g,in	2.03g,in	UITC12590 01/31/05.pd 10/12/04.r					
							Scr Rst: Alpha: 1.02E+02 pCi/g Beta: 3.01E+01 pCi/g	
14 G6CX5-1-AA J5C160275-13-SAMP [Barcode] 03/14/2005 13:00	2.01g,in	2.01g,in	UITC12591 01/31/05.pd 10/12/04.r					
							Scr Rst: Alpha: 8.31E+01 pCi/g Beta: 2.28E+01 pCi/g	

*6
9
11
2
59
5
14*

3/18/2005 3:56:28 PM

Sample Preparation/Analysis

Balance Id:1120373922

108302, FLUOR HANFORD IC
Hanford Inc

, Flour

7S Uiso PrpRC5013RC5019, SepRC5070(5039)
SR Uranium-234,235,238 by Alpha Spec

5067
02 3-25-05

Pipet #:

Report Due: 03/31/2005

Sep1 DT/Tm Tech:

Batch: 5076485 SOIL pCi/g
SEQ Batch, Test: None

PM, Quote: BG2, 50639

Sep2 DT/Tm Tech:

Prep Tech: ,HansenM

102

03

1

1

3

4

6

Work Order, Lot, Sample Date/Time	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
15G6CX8-1-AA J5C160275-14-SAMP [REDACTED] 03/10/2005 09:20	2.05g,in	2.05g,in	UUTC12592 01/31/05.pd 10/12/04.r	200				Scr Rst: Alpha: 2.02E+02 pCi/g Beta: 4.95E+01 pCi/g
16G6C0A-1-AA J5C160275-15-SAMP [REDACTED] 03/10/2005 12:31	2.00g,in	2.00g,in	UUTC12593 01/31/05.pd 10/12/04.r					Scr Rst: Alpha: 7.26E+01 pCi/g Beta: 1.76E+01 pCi/g
17G6C0D-1-AA J5C160275-16-SAMP [REDACTED] 03/10/2005 14:50	2.05g,in	2.05g,in	UUTC12594 01/31/05.pd 10/12/04.r					Scr Rst: Alpha: 4.70E+01 pCi/g Beta: 1.28E+01 pCi/g
18G6C0H-1-AA J5C160275-17-SAMP [REDACTED] 03/10/2005 15:35	2.01g,in	2.01g,in	UUTC12595 01/31/05.pd 10/12/04.r					Scr Rst: Alpha: 6.37E+02 pCi/g Beta: 1.81E+02 pCi/g
19G6C0L-1-AA J5C160275-18-SAMP [REDACTED] 03/10/2005 16:00	2.07g,in	2.07g,in	UUTC12596 01/31/05.pd 10/12/04.r					Scr Rst: Alpha: 5.03E+02 pCi/g Beta: 1.49E+02 pCi/g
20G6C0M-1-AA J5C160275-19-SAMP [REDACTED] 03/10/2005 09:20	2.05g,in	2.05g,in	UUTC12597 01/31/05.pd 10/12/04.r					Scr Rst: Alpha: 7.48E+01 pCi/g Beta: 1.92E+01 pCi/g
21G6GV8-1-AA-B J5C170000-485-BLK [REDACTED] 03/08/2005 12:15	2.00g,in	2.00g,in	UUTC12598 01/31/05.pd 10/12/04.r					Scr Rst: Alpha: Beta:

3/18/2005 3:56:29 PM

Sample Preparation/Analysis

Balance Id:1120373922

7S Ulso PrpRC5013RC5015, SepRC5079(5039)
SR Uranium-234,235,238 by Alpha Spec
5I CLIENT: HANFORD

*5067
Oct 3-2505*

Pipet #:

Report Due: 03/31/2005

Sep1 DT/Tm Tech:

Batch: 5076485

pCi/g

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,HansenM

Work Order, Lot, Sample Date/Time	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
22G6GV8-1-AC-C J5C170000-485-LCS XXXXXXXXXXXXXXXXXXXX 03/08/2005 12:15	200g,in		UISH0351 02/10/05,pd 07/23/04	Zoo				
	Amt/Rec:	#Containers: 1				Scr Rst:	Alpha:	Beta:

Comments: *samples were crashed out 3/21/05*

All Clients for Batch:
108302, FLOOR HANFORD IC Flour Hanford Inc , BG2, 50639

66CW51AA-SAMP Constituent List:											
U-232	RDL:	pCi/g	LCL:20	UCL:105	RPD:35	U-234	RDL:1	pCi/g	LCL:	UCL:	RPD:
U-235	RDL:1	pCi/g	LCL:	UCL:	RPD:	U-238	RDL:1	pCi/g	LCL:	UCL:	RPD:
66GV81AA-BLK:											
U-232	RDL:	pCi/g	LCL:20	UCL:105	RPD:35	U-234	RDL:1	pCi/g	LCL:	UCL:	RPD:
U-235	RDL:1	pCi/g	LCL:	UCL:	RPD:	U-238	RDL:1	pCi/g	LCL:	UCL:	RPD:
66GV81AC-LCS:											
U-232	RDL:	pCi/g	LCL:20	UCL:105	RPD:35	Uranium	RDL:	pCi/g	LCL:70	UCL:130	RPD:35
66CW51AA-SAMP Calc Info:											
Uncert Level (#s): 2		Decay to SaDt: Y		Blk Subt.: N		Sci.Mot.: Y		ODRs: B			
66GV81AA-BLK:											
Uncert Level (#s): 2		Decay to SaDt: Y		Blk Subt.: N		Sci.Mot.: Y		ODRs: B			
66GV81AC-LCS:											
Uncert Level (#s): 2		Decay to SaDt: Y		Blk Subt.: N		Sci.Mot.: Y		ODRs: B			

Approved By _____ Date: _____

3/28/2005 12:20:05 PM

ICOC Fraction Transfer/Status Report

ByDate: 3/28/2004, 4/2/2005, Batch: '5076485', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting	Comments
5076485				
AC	CalcC	HansenM	3/18/2005 3:57:48 PM	
SC		wagnerj	IsBatched 3/17/2005 5:53:12 PM	ICOC_RADCALC v4.8.08
SC		HansenM	InPrep2 3/18/2005 3:57:48 PM	RICH-RC-5032 REVISION 2
SC		HansenM	Prep2C 3/21/2005 5:08:03 PM	RICH-RC-5032 REVISION 2
SC		FinchA	InSep1 3/24/2005 4:16:38 PM	RICH-RC-5087 REVISION 6
SC		BarbosaH	InSep2 3/24/2005 5:08:04 PM	RICHRC5039 REV4
SC		BarbosaH	Sep2C 3/24/2005 7:57:55 PM	RICHRC5039 REV4
SC		BlackCL	CalcC 3/25/2005 9:21:29 AM	RICH-RD-0008 REVISION 3
AC		HansenM	3/21/2005 5:08:03 PM	
AC		FinchA	3/24/2005 4:16:38 PM	
AC		BarbosaH	3/24/2005 5:08:04 PM	
AC		BarbosaH	3/24/2005 7:57:55 PM	
AC		BlackCL	3/25/2005 9:21:29	

AC: Accepting Entry; SC: Status Change

STL Richland
Richland Wa.

3/21/2005 1:59:10 PM

Sample Preparation/Analysis

Balance Id: _____

108302, FLUOR HANFORD IC
Hanford Inc

, Flour AN Tc-99 Prp/SepRC5013/5078
S5 Technetium-99 by Liquid Scint
SI CLIENT: HANFORD

Pipet #: _____

Report Due: 03/31/2005

Sep1 DT/Tm Tech: _____

Batch: 5076486 SOIL
SEQ Batch, Test: None

pCi/g

PM, Quote: BG2, 50639

Sep2 DT/Tm Tech: _____

Prep Tech: _____

Work Order, Lot, Sample Date/Time	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 G6CW5-1-AC J5C160275-1-SAMP [REDACTED] 03/08/2005 12:15								
		AmtRec: 60G	#Containers: 1				Scr Rst: Alpha: 7.12E+01 pCi/g	Beta: 1.75E+01 pCi/g
2 G6CW8-1-AC J5C160275-2-SAMP [REDACTED] 03/09/2005 14:30								
		AmtRec: 60G	#Containers: 1				Scr Rst: Alpha: 7.08E+01 pCi/g	Beta: 1.65E+01 pCi/g
3 G6CW8-1-AD-X J5C160275-2-DUP [REDACTED] 03/09/2005 14:30								
		AmtRec: 60G	#Containers: 1				Scr Rst: Alpha: 7.08E+01 pCi/g	Beta: 1.65E+01 pCi/g
4 G6CX1-1-AC J5C160275-3-SAMP [REDACTED] 03/09/2005 08:20								
		AmtRec: 60G	#Containers: 1				Scr Rst: Alpha: 6.57E+01 pCi/g	Beta: 1.62E+01 pCi/g
5 G6CX1-1-AD-S J5C160275-3-MS [REDACTED] 03/09/2005 08:20								
		AmtRec: 60G	#Containers: 1				Scr Rst: Alpha: 6.57E+01 pCi/g	Beta: 1.62E+01 pCi/g
6 G6CXJ-1-AC J5C160275-4-SAMP [REDACTED] 03/09/2005 09:05								
		AmtRec: 60G	#Containers: 1				Scr Rst: Alpha: 1.35E+02 pCi/g	Beta: 3.89E+01 pCi/g
7 G6CXL-1-AC J5C160275-5-SAMP [REDACTED] 03/09/2005 09:30								
		AmtRec: 60G	#Containers: 1				Scr Rst: Alpha: 1.58E+02 pCi/g	Beta: 4.23E+01 pCi/g

3/21/2005 1:59:12 PM

Sample Preparation/Analysis

Balance Id: _____

108302, FLUOR HANFORD IC
Hanford Inc

, Flour AN Tc-99 Prp/SepRC5013/5078
S5 Technetium-99 by Liquid Scint
SI CLIENT: HANFORD

Pipet #: _____

Report Due: 03/31/2005

Sep1 DT/Tm Tech: _____

Batch: 5076486 SOIL pCi/g
SEQ Batch, Test: None

PM, Quote: BG2, 50639

Sep2 DT/Tm Tech: _____

Prep Tech: _____

Work Order, Lot, Sample Date/Time	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
8 G6CXN-1-AC J5C160275-6-SAMP [REDACTED] 03/08/2005 15:30								
		AmtRec: 60G	#Containers: 1				Scr Rst: Alpha: 6.57E+01 pCi/g	Beta: 1.64E+01 pCi/g
9 G6CXQ-1-AC J5C160275-7-SAMP [REDACTED] 03/09/2005 12:07								
		AmtRec: 60G	#Containers: 1				Scr Rst: Alpha: 4.64E+01 pCi/g	Beta: 1.05E+01 pCi/g
10 G6CXR-1-AC J5C160275-8-SAMP [REDACTED] 03/09/2005 14:30								
		AmtRec: 60G	#Containers: 1				Scr Rst: Alpha: 6.33E+01 pCi/g	Beta: 1.77E+01 pCi/g
11 G6CXT-1-AC J5C160275-9-SAMP [REDACTED] 03/11/2005 14:30								
		AmtRec: 60G	#Containers: 1				Scr Rst: Alpha: 4.37E+01 pCi/g	Beta: 1.15E+01 pCi/g
12 G6CXV-1-AC J5C160275-10-SAMP [REDACTED] 03/11/2005 09:10								
		AmtRec: 60G	#Containers: 1				Scr Rst: Alpha: 7.32E+01 pCi/g	Beta: 1.71E+01 pCi/g
13 G6CXW-1-AC J5C160275-11-SAMP [REDACTED] 03/11/2005 12:10								
		AmtRec: 60G	#Containers: 1				Scr Rst: Alpha: 8.50E+01 pCi/g	Beta: 2.16E+01 pCi/g
14 G6CXX-1-AC J5C160275-12-SAMP [REDACTED] 03/14/2005 10:45								
		AmtRec: 60G	#Containers: 1				Scr Rst: Alpha: 1.02E+02 pCi/g	Beta: 3.01E+01 pCi/g

3/21/2005 1:59:12 PM

Sample Preparation/Analysis

Balance Id: _____

108302, FLUOR HANFORD IC
Hanford Inc

, Flour AN Tc-99 Prp/SepRC5013/5078
S5 Technetium-99 by Liquid Scint
SI CLIENT: HANFORD

Pipet #: _____

Report Due: 03/31/2005

Sep1 DT/Tm Tech: _____

Batch: 5076486 SOIL pCi/g
SEQ Batch, Test: None

PM, Quote: BG2, 50639

Sep2 DT/Tm Tech: _____

Prep Tech: _____

Work Order, Lot, Sample Date/Time	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
15G6CX5-1-AC J5C160275-13-SAMP [REDACTED] 03/14/2005 13:00								
		AmtRec: 60G	#Containers: 1				Scr Rst: Alpha: 8.31E+01 pCi/g Beta: 2.28E+01 pCi/g	
16G6CX8-1-AC J5C160275-14-SAMP [REDACTED] 03/10/2005 09:20								
		AmtRec: 60G	#Containers: 1				Scr Rst: Alpha: 2.02E+02 pCi/g Beta: 4.95E+01 pCi/g	
17G6C0A-1-AC J5C160275-15-SAMP [REDACTED] 03/10/2005 12:31								
		AmtRec: 60G	#Containers: 1				Scr Rst: Alpha: 7.26E+01 pCi/g Beta: 1.76E+01 pCi/g	
18G6C0D-1-AC J5C160275-16-SAMP [REDACTED] 03/10/2005 14:50								
		AmtRec: 60G	#Containers: 1				Scr Rst: Alpha: 4.70E+01 pCi/g Beta: 1.28E+01 pCi/g	
19G6C0H-1-AC J5C160275-17-SAMP [REDACTED] 03/10/2005 15:35								
		AmtRec: 60G	#Containers: 1				Scr Rst: Alpha: 6.37E+02 pCi/g Beta: 1.81E+02 pCi/g	
20G6C0L-1-AC J5C160275-18-SAMP [REDACTED] 03/10/2005 16:00								
		AmtRec: 60G	#Containers: 1				Scr Rst: Alpha: 5.03E+02 pCi/g Beta: 1.49E+02 pCi/g	
21G6C0M-1-AC J5C160275-19-SAMP [REDACTED] 03/10/2005 09:20								
		AmtRec: 60G	#Containers: 1				Scr Rst: Alpha: 7.48E+01 pCi/g Beta: 1.92E+01 pCi/g	

STL Richland
Richland Wa.

Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2
pd - Prep Dt, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added

Page 3

ISV - Insufficient Volume for Analysis

WO Cnt: 21
ICOC v4.8.08

3/21/2005 1:59:14 PM

Sample Preparation/Analysis

Balance Id: _____

AN Tc-99 Prp/SepRC5013/5078
S5 Technetium-99 by Liquid Scint
5I CLIENT: HANFORD

Pipet #: _____

Report Due: 03/31/2005

Sep1 DT/Tm Tech: _____

Batch: 5076486

pCi/g

Sep2 DT/Tm Tech: _____

SEQ Batch, Test: None

Prep Tech: _____

Work Order, Lot, Sample Date/Time	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
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66CXCLAD-MS:

66GWF1AA-BLK:

Tc-99 RDL:15 pCi/g LCL: UCL: RPD:

66GWF1AC-LCS:

Tc-99 RDL:15 pCi/g LCL:70 UCL:130 RPD:35

66GWF1AD-IBLK:

Tc-99 RDL:15 pCi/g LCL: UCL: RPD:

66GWF1AE-IBLK:

Tc-99 RDL:15 pCi/g LCL: UCL: RPD:

66GWF1AF-BLK:

Tc-99 RDL:15 pCi/g LCL: UCL: RPD:

66CW51AC-SAMP Calc Info:

Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

66CXCLAD-MS:

Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

66GWF1AA-BLK:

Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

66GWF1AC-LCS:

Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

66GWF1AD-IBLK:

Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

66GWF1AE-IBLK:

Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

66GWF1AF-BLK:

Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____

Date: _____

3/29/2005 1:48:42 PM

ICOC Fraction Transfer/Status Report

ByDate: 3/29/2004, 4/3/2005, Batch: '5076486', User: 'ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting	Comments
5076486				
AC	CalcC	FinchA	3/21/2005 4:21:23 PM	
SC		wagnerj	IsBatched 3/17/2005 5:53:12 PM	ICOC_RADCALC v4.8.08
SC		FinchA	InSep1 3/21/2005 4:21:23 PM	RICH-RC-5078 REVISION 2
SC		FinchA	Sep1C 3/24/2005 3:04:04 PM	RICH-RC-5078 REVISION 2
SC		StringerR	InCnt1 3/24/2005 3:11:26 PM	RICH-RD-0001 REVISION 3
SC		BlackCL	CalcC 3/28/2005 9:50:10 AM	RICH-RD-0001 REVISION 3
AC		FinchA	3/24/2005 3:04:04 PM	
AC		StringerR	3/24/2005 3:11:26 PM	
AC		BlackCL	3/28/2005 9:50:10	

AC: Accepting Entry; SC: Status Change

STL Richland
Richland Wa.